

# AGRICULTURAL OUTLOOK

November 1987

Economic Research Service  
United States Department of Agriculture

Controlling Ag Pollution  
of Coastal Waters

# AGRICULTURAL OUTLOOK

November 1987/AO-136



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# In Brief . . . News of Production Costs, Farmland Values, Taxes

Competition among meats probably will keep beef prices from rising, despite smaller beef supplies. Hog output is expanding, and pork production in 1988 may be up 10 percent from 1987. Broiler production continues to increase and may run 5 percent higher next year, with lower prices expected.

Turkey slaughter is up sharply. Total 1987 production may be 16 percent higher than 1986. Increases will slow to around 6 percent in 1988 because returns are forecast lower from large supplies.

U.S. stocks of corn and sorghum are above last year, but those of wheat and soybeans are lower. The *Grain Stocks* report showed lower-than-expected supplies, helping boost prices in early October.

The U.S. apple crop will be 22 percent higher than last year because of almost ideal weather from blossom to harvest. Consumer prices for apples likely will fall. Citrus production is forecast up slightly this winter.

According to preliminary estimates, the cost of producing major U.S. crops in 1987 is down slightly from 1986, because fertilizer and chemical expenses continued down during much of the year. However, prices have begun to increase, and 1988's costs are expected to be above 1987's.



Energy costs likely will rise the most, averaging 4.9 percent over 1987, followed by autos and trucks, and seed. The composite index for prices paid next year for all production items, including wages, taxes, and livestock inputs, could increase 1.3 percent.

The most recent signup period for the Conservation Reserve Program (CRP), July 1987, brought total signup to over 200,000 contracts covering almost 23 million acres. Contracts have been signed to retire about 2 million acres in fiscal 1986, 13.4 million in fiscal 1987, and 2.3 million in fiscal 1988.

Surveys of rural appraisers show renewed confidence in the farmland market. The August 1 survey showed that 64 percent of rural land appraisers felt land values were stable from May 1 through July 31, 22 percent thought values had increased, and only 14 percent believed values had declined.

The same survey taken on May 1 showed 57 percent believed values had not changed between February 1 and April 30. Ten percent said values had increased, and 33 percent felt values had declined. Both the May and the August surveys indicated an increasing number of land sales.

Crop acreage used for crops has been trending downward since 1981, as farmers have idled more land in farm programs. Producers likely idled nearly 68.5 million acres in 1987, 23.5 million more than in 1986.

Runoff of fertilizers, pesticides, and sediment has contributed to estuary pollution along U.S. coastal waterways. Increasingly, agricultural pollution may be targeted for control, through structural measures such as cropland terracing and sod waterways or nonstructural methods such as conservation tillage and more careful management of fertilizers and pesticides.

Rulings on tax treatment of Government program payments have left some farmers puzzled. An October 13 decision restored favorable tax treatment to "Quick PIK" exchanges. However, tax treatment of Dairy Termination and Conservation Reserve program payments continues to trouble some farmers.



## Agricultural Economy

The Food Security Act of 1985 was implemented fully beginning with the 1986 crop. With national elections 1 year away and the presidential primaries beginning in a few months, the success of the 1985 act will be a major discussion point in farm policy debate.

The Administration stated three major goals for this farm legislation:

- flexible commodity price supports to allow greater export potential,
- consistency among commodity programs and policies on trade, conservation, research, credit, and grain reserves, and
- reduced Government spending on agriculture.

### *How Well Has Law Met These Goals?*

When price supports fell, market prices also went down. Lower price supports, the Export Enhancement Program (EEP), and marketing loans for cotton and rice have all boosted export sales.

Agricultural export volume has risen from 109 million tons in 1986 to a forecast 129 million this year. Volume is up 18 percent and value is up 7 percent. In view of lower commodity

prices, increased volume was not surprising. The volume was helped by a less expensive dollar and the Targeted Export and Export Enhancement Programs.

Export volume was very low in fiscal 1986. One reason was that importers adopted a wait and see attitude toward new American prices as the 1985 farm legislation was implemented, and deferred purchases to 1987 as much as possible.

### *1986 May Have Been The Bottom*

The low point in the farm economy may have been fiscal 1986. Farm expenditures by the Government, as measured by net CCC outlays, reached an alltime high of \$25.8 billion.

This happened in a year when farm foreclosures were high, the amount of debt at risk was extremely large, land values were dropping, and the export news was mostly bad. Farmers were harvesting near-record crops to sell at lower prices to a shrinking market. Crop receipts in 1986 were down \$11 billion from 1985.

This all sounds discouraging for farmers, but farm income was record high last year, partly because income protection was in place. In 1986, net cash income was \$52 billion, of which direct Government payments constituted \$11.8 billion. Farmers were also helped by lower cash expenses.

The income picture is even better in 1987. Net cash income is forecast to be \$54-\$58 billion, helped by additional support, lower expenses, strong livestock receipts, and expanding exports. However, \$14-\$16 billion of this total is direct Government payments.

One feature of the farm act was to freeze target prices at 1985 levels in 1986 and 1987 and allow loan rates to drop. This maintained income protection while stimulating export and domestic sales. Target prices will fall slightly in 1988. Despite a flurry of new farm legislation introduced in 1987 to amend the 1985 act, it seems to be meeting the first of its original goals—income and exports are up.

### *Government Programs More Consistent*

Consistency among programs is another goal. Some improvement has been achieved. Despite acreage cutbacks, commodity production remains

large, mainly because of good weather. However, programs for export assistance are in place to whittle down large stocks.

Through increased sales and use, ending stocks for most commodities are forecast to be down in 1987. Conservation programs are helping to take some of the most erodible land out of production. Protecting the land resource also reduces acres in crops, bringing about consistency between conservation and income support programs.

The third goal—reduced spending—has not yet been fulfilled. CCC net outlays in 1986 were a record \$25.8 billion. However, estimates for 1987 show a drop to \$23 billion, and a further drop to \$16 billion in 1988. By 1988, spending on price support loans will be less than half the 1986 level, although well above the level of the late 1970's. Spending on export assistance programs will be up fivefold, to over \$600 million.

For most crops, more than 80 percent of eligible base acreage has been enrolled in Government programs in 1987. This means that more than 50 percent of producers took advantage of deficiency payments, price supports, and other program benefits. The Government assistance is reflected in the income statistics.

It is also reflected in the debt figures. Farmers have been cautious about expansion and business plans. Additional income in many cases has been used to pay down debts. The sector average debt-to-asset ratio is forecast to fall to 22 percent in 1987, from 24.9 in 1985.

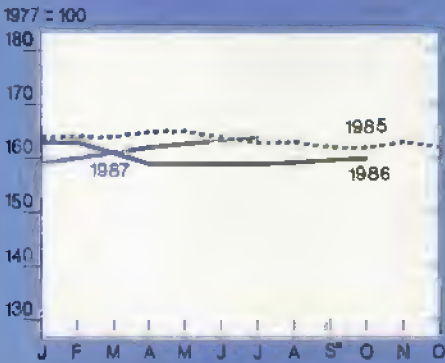
Debt-to-equity is down to 28 percent in 1987 from 33.2 in 1985. Debt-to-net cash income is at 283 percent in 1987, from 406 in 1985 and a high of 576 in 1981. Farmers are spending less on inputs because of reduced plantings and lower input prices, lower fertilizer application rates, and delays in machinery purchases. Cash expenses have fallen an unprecedented 3 consecutive years and are one major reason for the high income.

The situation appears to be brightening with lower costs and continued Government support leading to high

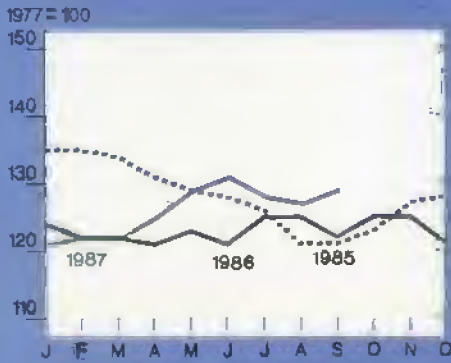


# Prime Indicators of the U.S. Agricultural Economy

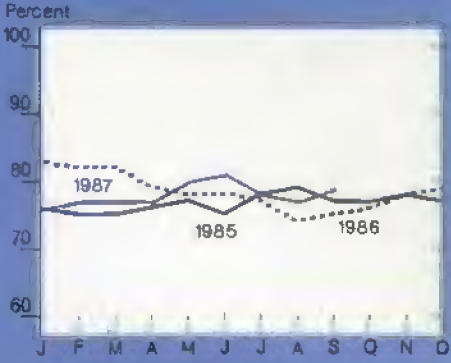
Index of prices paid by farmers<sup>1</sup>



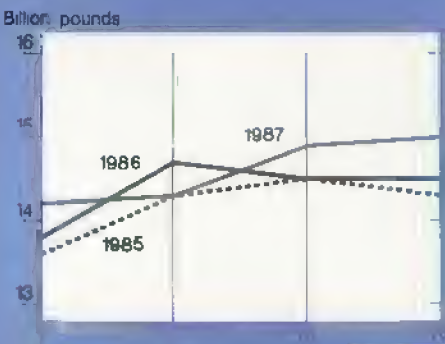
Index of prices received by farmers<sup>2</sup>



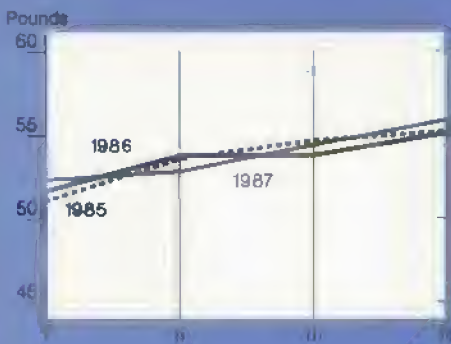
Ratio of prices received to prices paid



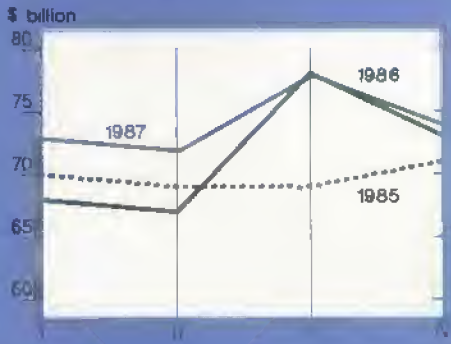
Red meat & poultry<sup>3</sup>  
production



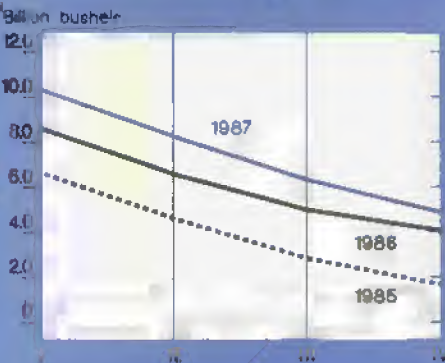
Red meat & poultry  
consumption, per capita<sup>3,4</sup>



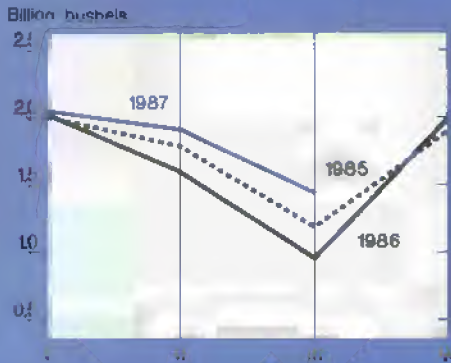
Cash receipts from  
livestock & products<sup>5</sup>



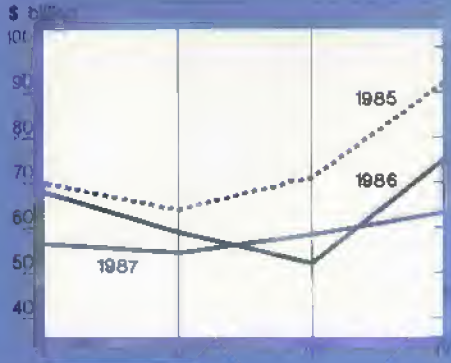
Corn beginning stocks<sup>6</sup>



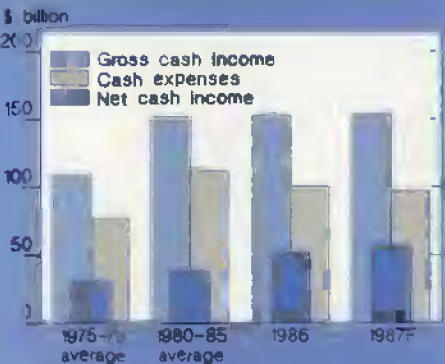
Corn disappearance<sup>6</sup>



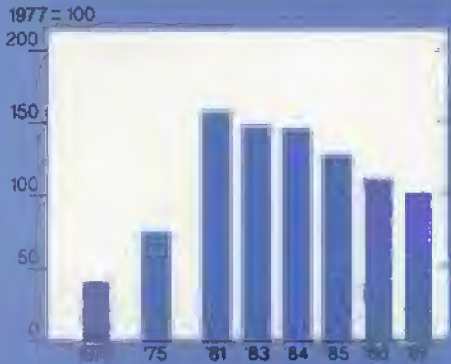
Cash receipts from crops<sup>5</sup>



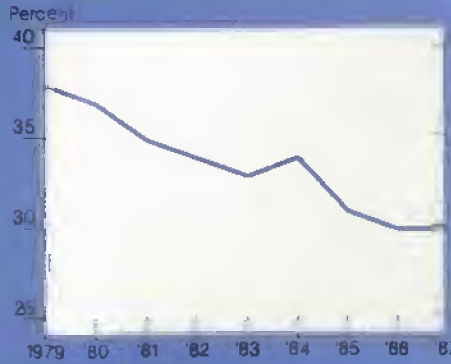
Farm net cash income



Farm real estate values

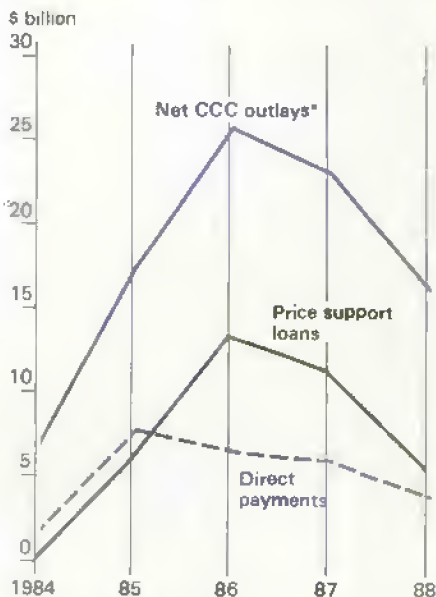


Farm value/retail food costs



<sup>1</sup>For commodities and services interest, taxes, and wages. Beginning in 1986, data are only available quarterly. <sup>2</sup>For all farm products.  
<sup>3</sup>Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. <sup>4</sup>Retail weight. <sup>5</sup>Seasonally adjusted annual rate.  
<sup>6</sup>Q = Oct.-Feb.; I = Mar.-May; II = June-Aug.; IV = Sept.-Nov.

## CCC Outlays Recede from Peak



\* See table 37 for CCC outlays by commodity & function. 1987 & 1988 estimated.

farm incomes. So why is the impression many still have of the farm sector one of severe, widespread depression?

### Farm Act a Safe Harbor

Farm legislation has provided safe harbor for many farmers to restructure or pay down their debts, and ease the transition to a more competitive world market. Legislation did not guarantee survival to farmers who were drowning in a sea of debt.

Farmers who owed large debts, had small or negative cash flows, and held land that in many cases was worth substantially less than they had paid for it had no choice but to default on loans or be foreclosed. Banks are now feeling the ripple effect of loan defaults; a record number of banks are forecast to close in 1987, many of them rural and agricultural banks.

The conclusion: Farm legislation is working for the sector as a whole although the cost is high and some farmers are still in financial difficulty. Government assistance has not rescued all farmers. But to many viable farm operations, it has provided the assistance needed to get through a time when world competition could have put them out of business. [Herb Moses (202) 786-3333]

## LIVESTOCK OVERVIEW

Since spring, meat supplies have been smaller than expected and prices higher. Pork production in the second and third quarters fell short of expectations by about 6 percent. Pork production was 7 percent below the year before in the second quarter and up 5 percent in the third. The shortfall exacerbated the low level of pork cold storage stocks, which were not built up because of low prices and expected production increases.

### Pork Shortfall Benefited Beef

Beef producers benefited from smaller pork production. In the second quarter, beef output was 8 percent below a year earlier because of a 20-percent reduction in cow slaughter and a 2-percent drop in fed cattle marketings.

Beef production would have been even lower, but to make up for reduced pork supplies, packers bid up prices for fed cattle to get feeders to market them ahead of schedule. Fed cattle in the High Plains area were marketed 20 to 40 pounds lighter than a year earlier.

Prices for Choice fed steers at Omaha rose from near \$60 per cwt in the winter quarter to over \$70 in mid-spring. Fed cattle marketings began to rise in July because of large feeder cattle placements during the first half of 1987. Although prices declined to the middle \$60's, cattle feeders continued a brisk marketing pace on the increasing supply of fed cattle.

Beef imports were reduced unexpectedly from late August through September when some Australian beef was discovered to be contaminated with pesticides. This resulted in unusual tightness in processing beef supplies. The Australian Government is reinspect the impounded beef. When it is certified, it will be reexamined by USDA's Food Safety and Inspection Service. A sizable quantity of this meat is likely to pass and reenter the market.

The market will have to contend with record total meat production this fall

and through at least 1988, if not well into 1989. This increase occurs as poultry production continues to expand and pork production continues the expansion begun this summer. Broiler and turkey prices are already well below a year ago, and hog prices declined sharply in late summer.

Beef production is expected to decline seasonally this fall to 4 percent below a year earlier. Fed beef supplies will decline but remain above a year earlier through mid-1988, while nonfed slaughter is expected to decline further. Further reductions in beef production will be very positive for the cattle sector. However, expanding supplies and lower prices of competing meats will intensify competition within the livestock sector.

Prices for Choice beef at retail peaked in June and July at \$2.49 a pound and declined to \$2.45 in August, still well above a year earlier, when prices averaged \$2.30. Beef prices are expected to remain in the low-to-middle \$2.40's over the next year. But, if poultry or pork prices are forced lower than expected by competition among meats, it will be difficult for beef to hold its wider price differential, even with lower beef supplies.

### Hog Inventory Higher

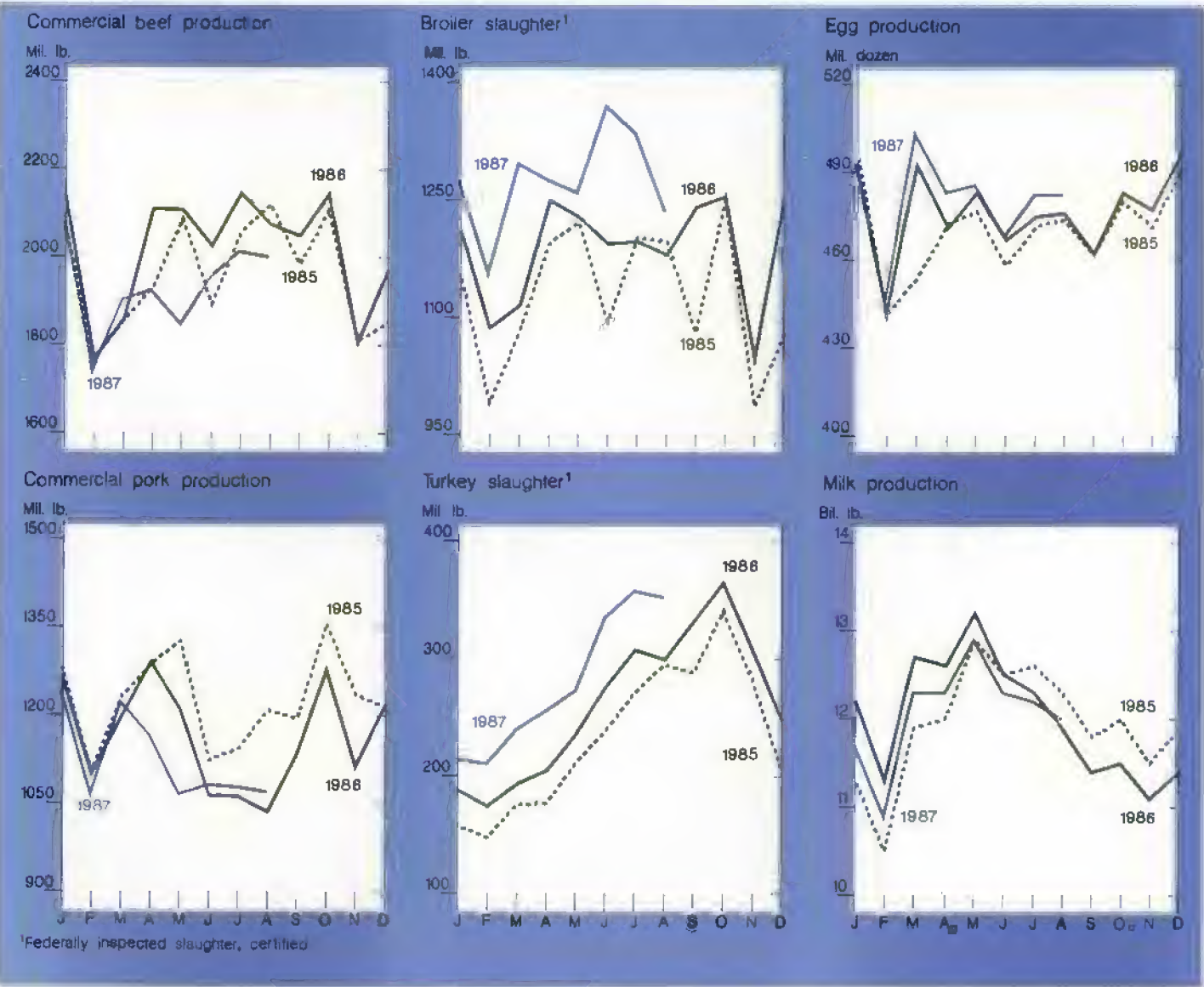
In the 10 States conducting quarterly hog surveys, the inventory of all hogs and pigs on September 1, 1987, totaled 42.8 million head, 9 percent above a year earlier and the highest September inventory since 1984. The number of market and breeding hogs was up 9 percent from a year before. During June-August, 2.26 million sows farrowed, up 11 percent from a year earlier.

Sows farrowing during June-August averaged 7.75 pigs per litter, compared with 7.79 last year. The slight decline broke a string of 16 consecutive quarters of year-to-year increases. The decline is partly due to a large proportion of gilts farrowing, and to some heat stress this summer.

Hog producers in the 10 quarterly survey States intended, as of September 1, to increase the number of sows farrowing by 7 percent during September-November, and by 8 percent during December 1987-February 1988. If these intentions are realized, historical trends and the high producer returns since mid-1986 indicate that the expansion phase of the current hog cycle will be moderate.



Production of Livestock and Products



Based on the market hog inventory and farrowing intentions, commercial pork production in 1987 may total 14,190 million pounds, up 1 percent from 1986. For all of 1988, pork production may total 15,650 million pounds, up 10 percent over 1987.

Barrow and gilt prices at the 7 markets may average \$53-\$54 per cwt in 1987, up \$2-\$3 over 1986. However, in 1988 prices may average in the high \$30's to low \$40's per cwt, a drop of \$12 to \$15. Retail pork prices in 1987 may average \$1.85 to \$1.90 a pound, with the highest prices in the third quarter. For all of 1988, retail pork prices may average near \$1.70 a pound.

**1988 Broiler Production May Be Up 5 Percent**

From the same period in 1986, broiler slaughter for the first 8 months of 1987 was up almost 8 percent and it is expected to be up more than 8.5 percent in the second half. Broiler chicks hatched during May-July 1987 were 7 percent above the same period last year, indicating third-quarter production will be 8-9 percent greater than 1986. August broiler chicks hatched were up more than 8 percent. That, coupled with broiler eggs in incubators in September, indicates that fourth-quarter production may be up more than 8 percent.

The size of the broiler egg laying flock is forecast 11 percent larger in March 1988 than it was in March 1987, indicating that production will continue to increase. Production in 1988 is expected to be 5 percent greater than in 1987, and the size of the broiler supply flock indicates that first-half production could be much greater.

The 12-city composite price for whole broilers averaged 46.4 cents per pound in September, down more than 6 cents from August 1987 and below last September's 61 cents. With continuing large broiler supplies, third-quarter prices averaged 48.7 cents per pound. Prices in October-December could be in

the 42-46 cent range, down from last year's 56 cents. Prices are expected to average 40-46 cents in 1988.

Broiler exports in January-July 1987 were up 38 percent from the same period last year. They are expected to be up about 37 percent for 1987 as a whole, because of increased exports to Japan, Canada, Egypt, and Iraq. Greater exports to the latter two countries are directly linked to the EEP. Ninety-eight percent of the current poultry meat export target has been met. Broiler exports in 1987 may approach 5 percent of total domestic production, up 1 percentage point from 1986.

### ***Second-Half Turkey Output Rising 15 Percent***

Turkey slaughter in January-August was up almost 20 percent from the same period in 1986. Placements in March through July averaged 15 percent above a year earlier, indicating second-half production may be up 15 percent from 1986. Poult placements for slaughter during 1987 indicate that total production may be 16 to 17 percent over 1986. Production in 1988 is expected to be up 6 to 7 percent from 1987, as producers face near breakeven or loss situations during the last half of 1987 and first half of 1988. (See the Commodity Spotlight on turkey in this issue.)

In addition, cold storage holdings on September 1 were up 24 percent over 1986. The 558.6 million pounds of stocks at the beginning of September were the largest ever. Fourth-quarter beginning stocks likely were about 620 million pounds, about 21 percent larger than a year ago and the largest in recent history. This will hold prices in the fourth quarter below those of a year ago.

The September northeastern hen turkey price was about 56 cents per pound, down from 81 cents last year. The third-quarter price likely was near 56 cents, while the fourth quarter price is expected to be in the 54-58 cent range. A year ago, prices were 80 and 78 cents per pound in the third and fourth quarters, respectively.

Prices during 1988 are expected to range from 51 to 57 cents per pound. First-quarter 1988 prices are expected to run 47 to 53 cents, as efforts are made to reduce larger-than-normal beginning stocks.

### ***1987 Egg Prices Lower***

Egg prices in 1987 likely will average below 1986 because of greater production. Production in the first 8 months was 1.3 percent higher than in the same period of 1986. Per capita domestic supplies for 1987 are expected to average close to 1986. However, long-term per capita consumption is declining.

Egg producers are expected to have enough hens laying this fall to increase production 1 percent over a year ago. Production in 1988 is expected to be down 0.5 percent from 1987, after producers experience losses or near-breakeven situations in the last half of 1987 and the first of 1988.

The September price for cartoned grade A large eggs in New York was 68.3 cents per dozen, down from 73 a year ago. The second-quarter price for cartoned Grade A large eggs in New York was 58.9 cents. Prices averaged 63.5 cents in the third quarter of 1987, down from 73 in 1986. Fourth-quarter prices are expected to be in the 63 to 67 cent range, as demand for holiday cooking increases consumption. Prices in 1988 are expected to be 60 to 66 cents.

Exports of eggs during January-July were 6 percent below the same period a year earlier. Egg exports were down 29 percent in July from a year before. Export forecasts call for 8.6 percent more trade as the less expensive dollar and the Export Enhancement Program make U.S. egg purchases more attractive. New EEP initiatives to the Middle East may increase exports.

### ***Butter, Cheese Raise Dairy Sales***

Commercial use of milk and dairy products during January-July was up almost 3 percent from a year earlier. However, this increase was less widespread among products than in recent years. Stronger sales of butter and cheese, spurred by aggressive marketing and promotion, were behind the increase.

Commercial disappearance of butter during January-July was up about 6 percent. American cheese sales increased 5 percent, while use of other varieties was more than 7 percent higher. Sales of Mozzarella cheese increased by almost 10 percent, providing a major boost for the "other cheese" varieties category.

Commercial disappearance of nonfat dry milk through July was up about 5 percent. Sales of frozen products were up about 2 percent, with ice milk use providing most of the strength. Use of cottage cheese was about 4 percent lower, low fat sales decreased about 2 percent, and creamed cottage cheese use declined by 5 percent.

Sales of fluid milk products in Federal milk order marketing areas and California during January-July were 0.3 percent above a year earlier. Sales of whole milk products were 4 percent lower, while sales of lowfat and skim milk were 5 percent higher.

Favorable dairy prices and rising consumer incomes, buttressed by expanded promotion, probably will keep sales climbing during the last part of 1987, although growth rates may slacken.

**For further information, contact:**  
Leland Southard, hogs; Mark Weimar, broilers, turkeys, and eggs; Ronald Gustafson, cattle; and Sara Short, dairy. All are at (202) 786-1830.

## **FIELD CROP OVERVIEW**

Harvesting is being completed throughout the Northern Hemisphere. Unfavorable weather delayed field operations in the Soviet Union and Western Europe, raising concerns about the quality of grain crops.

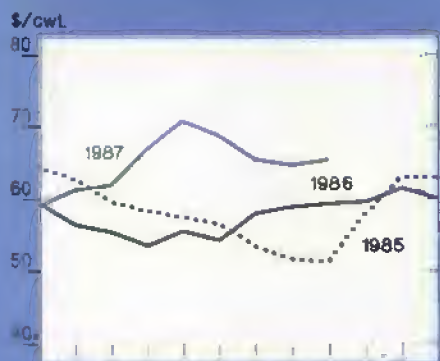
The Soviet grain crop is forecast to reach 210 million tons for the second year in a row. Good summer weather and increased application of intensive technology are expected to keep yields high, offsetting the adverse effects of poor planting and harvest weather.

Soviet expectations of a large grain crop are reflected in reduced 1987/88 imports. Preliminary reports indicate that the USSR has once again not fully met its obligated grain purchases from the United States. Under the terms of the U.S.-USSR Grain Agreement, the Soviet Union is required to purchase a minimum of 4 million tons of wheat and corn each. In addition, another 1 million tons of these grains must be taken unless limited offsetting purchases of soybeans or soybean meal are made in the proportion of 1 ton of soybeans and/or soybean meal for 2 tons of grain.

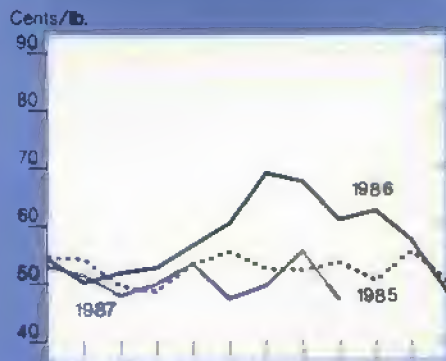


# Commodity Market Prices

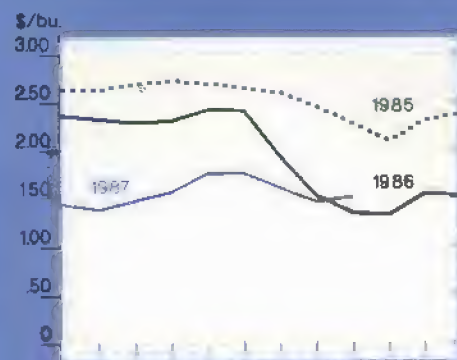
Choice steers, Omaha



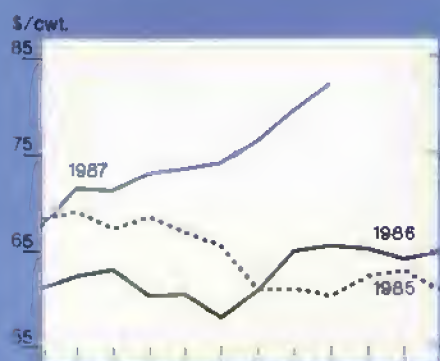
Broilers, 12-city average



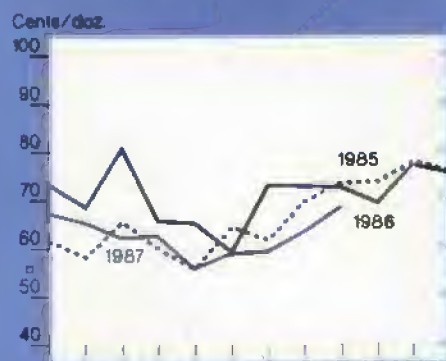
Corn, Chicago<sup>3</sup>



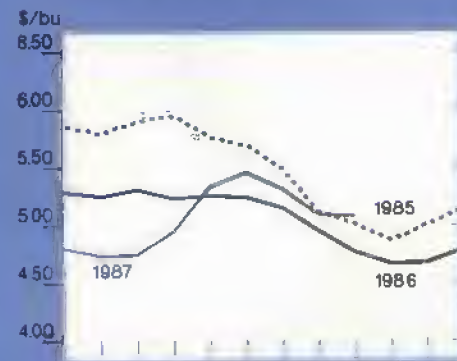
Feeder cattle, Kansas City<sup>1</sup>



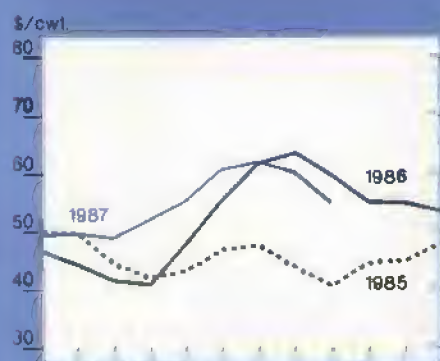
Eggs, New York<sup>2</sup>



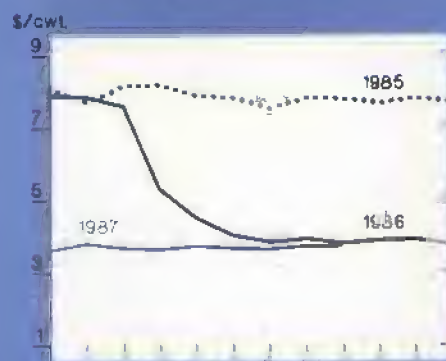
Soybeans, Chicago<sup>4</sup>



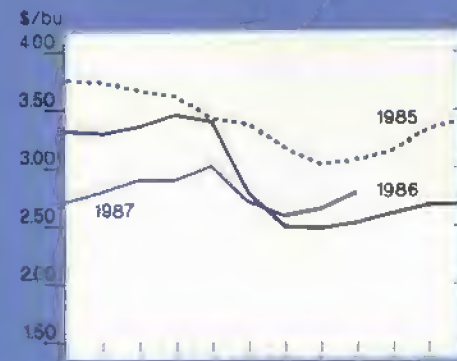
Barrows and gilts, 7 markets



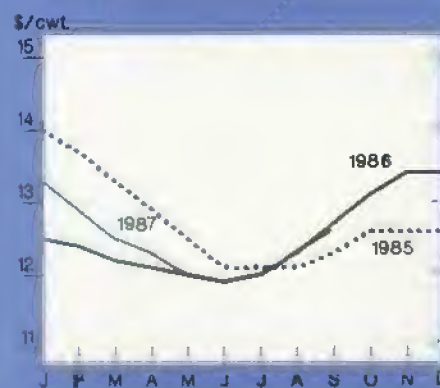
Rice (rough), SW Louisiana



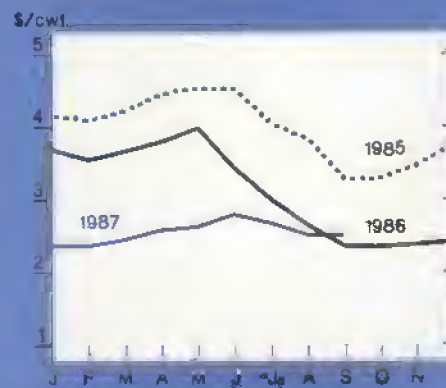
Wheat, Kansas City<sup>5</sup>



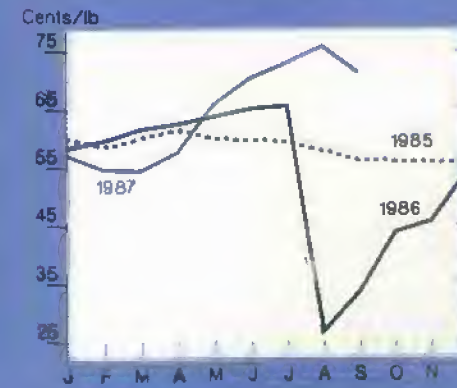
All milk



Sorghum, Kansas City



Cotton, average spot market



<sup>1</sup>600-700 lbs., medium no. 2

<sup>2</sup>Grade A Large

<sup>3</sup>No. 1 Yellow.

<sup>4</sup>No. 2 Yellow.

<sup>5</sup>No. 1 HRW.

The grain harvest in northern West European countries proceeded slowly because of continued rains, which will contribute to yield losses and reduce quality. Also, harvesting delays could retard and reduce EC winter plantings.

World grain stocks are projected to fall for the first time since 1983/84 because of a projected 4-percent reduction in 1986/87 total grain output and larger consumption. The largest year-to-year decline will be in coarse grains.

### **World Wheat Output To Decline**

World wheat output will fall 4 percent below 1986/87 as a result of a 22-million-ton decline in foreign production. Among major importers, the sharpest reduction will occur in the Soviet Union where wheat output is forecast to fall from last year's bumper 92-million-ton crop to 80.5 million. Soviet wheat yields are projected to reach 1.8 tons per hectare, 7 percent below the 1986/87 crop but the second highest since 1978.

Among the major wheat exporters, Australia and Canada are forecast to reduce output by 3.2 and 5.3 million tons, respectively. In contrast, the EC, one of the United States' largest competitors in world wheat markets, will increase its output by 3.5 million tons. However, poor harvest weather has lowered the quality of EC wheat. EC wheat exports are forecast to decline 6 percent and Australia's exports may drop 12 percent.

In contrast, the United States is expected to expand its share of world wheat trade from 31 to 35 percent (July/June year, excluding intra-EC trade). Lower loan rates and U.S. trade programs such as the EEP, P.L. 480, and CCC export credit guarantee programs are the major factors in U.S. exports.

Total U.S. wheat supplies for 1987/88 remain basically unchanged at 3.94 billion bushels. But, the implied increase in wheat feeding for the June-August quarter, resulting from the reduced wheat stocks estimate for September 1, pushed total disappearance up 9 percent from a month earlier, to 2.43 billion bushels. Carryout now is expected to be 1.51 billion bushels, 62 percent of expected annual use. The reduced stocks have led to an increase in the expected 1987/88 average market price to \$2.40 to \$2.60 a bushel.

### **Coarse Grain Output Stable**

Foreign coarse grain output is almost unchanged from last year in contrast to a 35.5-million-ton decline in U.S. production. Foreign barley output will rise 8 million tons, with the USSR accounting for virtually all the increase. Despite significant drops in Eastern Europe, the EC, and Thailand, foreign corn production is expected to rise slightly. A drop in foreign sorghum output of nearly 2 million tons is mainly accounted for by drought-reduced crops in India and Ethiopia.

The 1987/88 outlook for total global coarse grain exports is flat. The United States is projected to increase its share of trade from 50 to 58 percent (October/September, excluding intra-EC trade). Sharp competition with feed wheat is expected to continue because of ample supplies. World barley trade will fall in 1987/88 for the first time since 1982/83 because of lower imports by the Soviet Union and Saudi Arabia.

U.S. disappearance was adjusted upwards for 1986/87 and 1987/88 because September 1 corn stocks were less than expected. Carryout for sorghum dropped due to lower-than-expected carryin, the reduced production estimate, and a 25-million-bushel rise in feed use. But, average market price estimates remain unchanged at \$1.60 to \$1.90 for corn and \$1.50 to \$1.70 for sorghum.

Oat production was revised down 20 million bushels in October. With carryover stocks of oats almost record low, supplies will be very tight in 1987/88.

The carryin estimate for barley was revised upward to 356 million bushels, which combined with a decline in feed use raises the carryout estimate to 304 million bushels.

### **Rice Production To Fall**

World rice production will decline a second consecutive year to 301.5 million tons, the lowest since 1982/83. The drop is primarily because of the weak monsoon in South and Southeast Asia. (See the Commodity Spotlight on rice in this issue.) India's rice production is forecast down 13 million tons on a milled basis. Among the major exporters, Thai and Pakistani rice output is expected to fall 1.5 and

0.4 million tons, respectively, and more than offset a 600,000-ton increase in Burmese output.

Prices have risen sharply in recent months as supplies available for export are anticipated to fall to their lowest level since 1978. Production shortfalls among U.S. competitors will permit the United States to increase its 1987/88 marketing year share of global rice trade from 22 to 25 percent even through U.S. exports will decline 6 percent in volume.

### **Oilseed Crop Continues To Increase**

In 1987/88, a 6.6-million-ton increase in foreign oilseed output combined with a 1.8-million-ton rise in U.S. output will push global oilseed production to a record 203 million tons.

Foreign soybean production will rise almost 2.4 million tons. The bulk of increased foreign oilseed output will occur in the United States' largest soybean and soybean export market, the EC, whose oilseed production will jump by 3.4 million tons, a 41-percent increase. EC soybean production is expected to rise 567,000 tons; rapeseed, 2.2 million tons; and sunflowerseed, 674,000 tons.

EC oilseed production has taken off in recent years because high crushing subsidies have resulted in payments to producers for some oilseeds that are 2-3 times the world price. As a result, EC overall import demand for soybeans is expected to fall by 0.8 million tons.

Through the first half of 1987/88, U.S. sales of soybeans and soybean meal will benefit from reduced availability in South America. Brazil's soybean and soybean oil export registrations remain closed. Over the next 5 months, Brazil is expected to import soybeans and soybean oil to meet domestic demand. Therefore, until about March 1988, the United States will have to supply the bulk of world import demand.

In response to a continued strong soybean-corn price ratio, U.S. competitors are expected to increase soybean area this fall. Both Argentina and Brazil are expected to expand their soybean areas 6 to 7 percent as arable land is shifted out of corn production. Argentine soybean exports will rise by 1.0 million tons. As a result of this heavier export competition and re-



duced EC needs, U.S. soybean exports will drop 8 percent to 19.1 million tons.

The lower than-expected September 1 stocks estimate of 436 million bushels and an increase in exports led to a drop in the 1987/88 carryout for U.S. soybeans to 410 million bushels. With the bullish stocks estimate, the average market price for 1987/88 was raised to \$4.75 to \$5.25. The average price for soybean oil also was raised slightly to 14 to 17 cents a pound, with lower than expected carryin and increased domestic use.

### Cotton Demand Strong

World cotton production is forecast to rise almost 8 million bales in 1987/88. Consumption is projected at a near-record 82.7 million bales. Consumption by the major importers will approach last year's 18.3-million-bale record. As a result, 1987/88 ending stocks may fall 16 percent, from 32.3 million to 27.1 million bales.

This season's U.S. cotton crop is estimated to be 13.34 million bales, due to near record yields of 640 pounds an acre. Domestic mill use continues to increase, but ending stocks are expected to total 3.8 million bales, still below the 4-million-bale carryout goal set by the 1985 Farm Act.

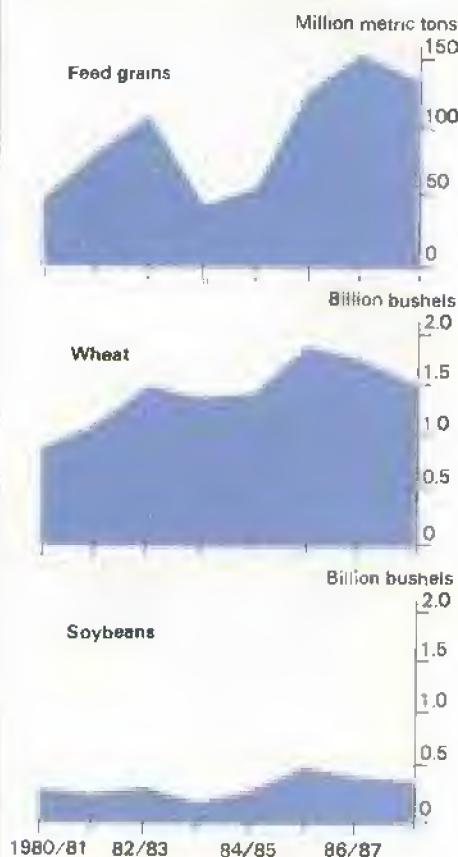
### U.S. Grain Stocks on September 1 Lower Than Expected

The recent Grain Stocks report shows higher U.S. stocks for corn and grain sorghum, but lower stocks for wheat and soybeans on September 1. Also, June stocks for barley rose and stocks for oats fell. Though some stocks were higher than a year earlier, stocks for most major crops were lower than forecast by USDA and private market analysts.

The commodity markets' reaction to the report was bullish, with cash and nearby futures prices for corn, wheat, and soybeans rising sharply. From the preceding day, cash prices on October 1 rose 5 cents for corn, 6 cents for wheat, and 8 cents for soybeans, while nearby futures were up even more for wheat and soybeans.

The markets seemed comfortable with the stock estimates for corn and soybeans. But, there were some who were skeptical about the wheat stocks estimate because it suggests that wheat feeding to livestock during the June-August quarter was near 1986/87's 346 million bushels. Given

### Carryover Stocks Declining from Recent Highs



Ending stocks for market year: September-August for feedgrains & soybeans, June-May for wheat. 1987/88 forecast

last summer's wheat prices relative to other feed crops, the implied feeding appears high to some analysts.

Corn stored in all places on September 1 totaled 4.88 billion bushels, up 21 percent from a year earlier and a new record. However, this figure was 47 million bushels below USDA's September 10 estimate. Most of the increase is in off-farm inventories, which rose sharply from 1.99 to 2.6 billion bushels, due to an increasing share of total stocks in CCC ownership. On-farm corn stocks rose 11 percent to 2.28 billion bushels, accounting for 47 percent of total stocks.

September 1 sorghum stocks were a third higher, at a record 732 million bushels, with 86 percent stored off the farm. June 1 barley stocks were up 9 percent to 356 million bushels, of which 55 percent are stored on the farm. June 1 oat stocks, however, declined 28 percent from a year earlier to 133 million bushels. About 78 percent of the oat stocks were stored on-farm.

Wheat stocks fell 6 percent from a year earlier to 2.96 billion bushels, of which 61 percent is stored off-farm. Though total wheat stocks for September 1 are large, Durum stocks are tightening, having fallen 17 percent to 147 million bushels. About 64 percent of total Durum stocks are on farm, down from 70 percent last year.

Soybean stocks of 436 million bushels were well below market expectations and 9 percent below USDA's September estimate. Total stocks fell 100 million bushels from a year earlier, and three-fourths are stored off the farm.

### USDA Issues \$2.3 Billion In Generic Certificates

Beginning October 1, USDA began issuing \$2.3 billion worth of generic certificates to farmers. Final 1986 deficiency payments for corn and sorghum totaled about \$3 billion, of which half were paid in certificates. The portion of 1986 payments made in cash was reduced by 4.3 percent to comply with Gramm-Rudman-Hollings. Another \$780 million of certificates were issued as annual rental payments to farmers who signed contracts to idle acreage during fiscal 1986 and 1987 in the Conservation Reserve Program.

It is difficult to assess certificate availability and use because ASCS is changing how county offices report loan and certificate activity. Weekly updates have not been made since August 26, when about \$2 billion of certificates were available. [Certificate issuance and exchange tables will not be presented in *Agricultural Outlook* until USDA resumes reporting certificate data. See the October issue for the most recent certificate data.]

The new issuances, along with a probable \$1.5 to \$1.75 billion of outstanding certificates on October 1, should make enough certificates available to those farmers who choose to "Quick PIK" crops placed under loan over the next few months. More certificates likely will be issued in December when advance 1987 deficiency payments for wheat, barley, and oats are paid.

Assuming that the share of total certificates exchanged for corn this fall is the same as the 75-percent cumulative share through August, and that the average posted county price for corn is \$1.50, farmers will free up about 1.15 billion bushels of corn with the \$2.3 billion in October issuances. At least



#### 1988 Feed Grain Program

Crop	Target price	Effective loan rate*
	\$/bushel	
Corn	2.97	1.74
Sorghum	2.82	1.65
Barley	2.55	1.42
Oats	1.57	0.89
Rye	--	1.48

\*Assumes no Gramm-Rudman-Hollings reductions for loan rates.

another 750 million bushels could be acquired with the outstanding certificates.

The share of total exchanges for corn in 1987/88 probably will be even higher, since wheat prices are rising sufficiently above the loan rate so that less wheat will go under loan this year and farmers' exchanges for wheat will be less. And, with over half of 1987/88 U.S. wheat exports expected to be made through the EEP, the share of total wheat exchanges from CCC stocks should rise from 1986/87's 47 percent.

A recent change in CCC policy also could encourage increased commodity exchanges from CCC stocks. Third parties interested in exchanging certificates for CCC stocks now are subject to lower carrying charges. Carrying charges are the fees charged for loading grain into and out of CCC storage.

Loadin charges, which typically are passed on to purchasers, normally run 7 to 10 cents a bushel, but now will be 5 cents. Loadout charges that are as high as 10 cents also have been reduced to 5 cents, if the grain is loaded out within 60 days of the sale. These changes were made to bring CCC certificate exchange prices more in line with domestic cash prices, and give purchasers of CCC stocks a margin of about 10 cents a bushel.

Based on current estimates for September 1 free stocks and expected disappearance from September 1987 to May 1988, about 135 million bushels of wheat will have to be acquired with certificates in order to meet market needs for the remainder of 1987/88. With farm prices rising well above loan, most new- and old-crop loan collateral likely will be redeemed with cash. Consequently, most wheat reacquired with certificates will come from CCC stocks.

The Internal Revenue Service (IRS) ruled in mid-October that, for those producers using the cash receipts and disbursements method of accounting, income accrued from using generic certificates to exchange for loan collateral may be taxable in the year that the reacquired commodities are marketed. This negates an IRS ruling of last February, which determined that gains were taxable in the year that certificate exchanges occur.

This may encourage additional loan placements of newly harvested crops before January 1 than would have occurred otherwise, and thus additional use of certificates to immediately exchange for loan collateral. However, many farmers likely will wait until next year to place this season's crops under loan to delay their tax liability for loan revenues. Last year, corn placements soared in January as many farmers preferred that loan revenues be taxed as 1987 income.

#### Little Change in 1988 Feed Grain Program

The 1988 feed grain program was announced on September 29 and contained no surprises. Market reaction was negligible. Participants will be required to idle 20 percent of their base acres to be eligible for program benefits.

Target prices for feed grains were constant for the 1986 and 1987 programs, but will drop slightly with the 1988 program. Basic loan rates were lowered by the 5-percent maximum allowed under the 1985 Farm Act. For corn, the basic loan rate will be \$2.17 a bushel, down from \$2.28. Loan rates for the other feed grains are based on feed value relative to corn, and thus will fall by similar amounts.

The Secretary has chosen to exercise the so-called Findley Amendment option, which allows for up to 20-percent reductions below the basic loan rates. Consequently, the 1988 effective loan rate for corn will be \$1.74 a bushel, down from \$1.82 for the current program. Pending outcome of the fiscal 1988 Federal budget decisions, farm program payments made in cash may be affected by Gramm-Rudman-Hollings reductions, as program payments were in 1986.

USDA did not announce whether a voluntary paid land diversion program will be implemented for the 1988 program. But, the 1987 diversion program was not announced until late October last year, several weeks after

the initial program announcement. The markets anticipate that a similar diversion program announcement will be forthcoming for 1988.

The Secretary also announced that:

- a marketing loan would not be implemented;
- offsetting compliance is not required, meaning that a participant does not have to enroll all acreage for a particular crop grown on different farms;
- except for oats, limited cross compliance is in place, meaning that planting can be no larger than base acreage for other crops not enrolled in 1988 programs;
- a 50/92 program will be implemented. This means that if at least half of a participant's plantable base is cropped and the remaining plantable base is maintained in conservation use, the participant is eligible to receive 92 percent of the normal deficiency payments.

Farmers placing crops under loan as of October 1 are paying higher interest on their loans. Loans made in October will carry a 7.5 percent interest rate, up from about 6.9 percent in September. [Tom Bickerton (202) 786-1691 and Michael Hanthorn (202) 786-1840]

#### HIGH-VALUE CROP OVERVIEW

##### Apple Crop To Set New Record

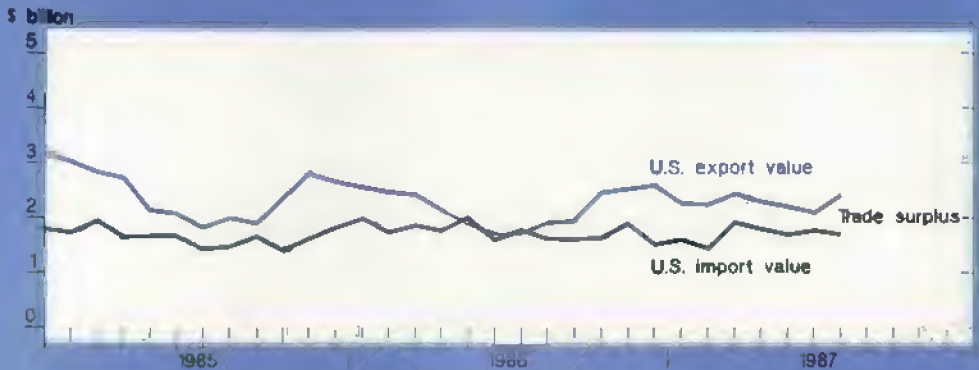
Graced with mild weather during bloom and almost ideal summer growing conditions, apple trees responded this fall by yielding a record U.S. crop. The harvest is estimated at 9.61 billion pounds, 22 percent more than last year.

Apple production will likely rise by 500 million pounds in Washington State, where many young trees are reaching commercial bearing age. Washington normally produces about a third of the U.S. crop. Michigan, which is rebounding from a very short 1986 harvest, will probably see its production rise by 64 percent this year. The large crop will push consumer prices for apples and apple products lower.

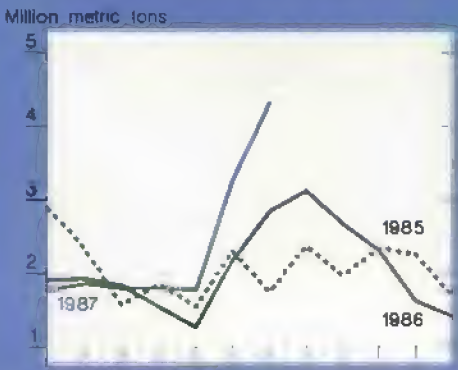


# U.S. Agricultural Trade Indicators

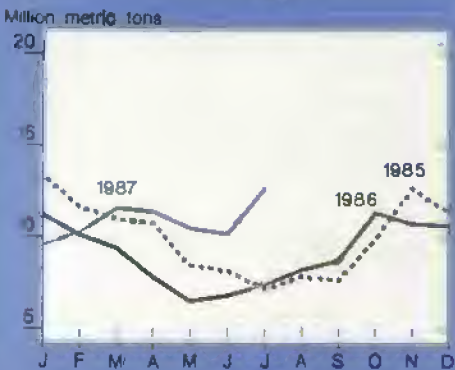
U.S. agricultural trade balance



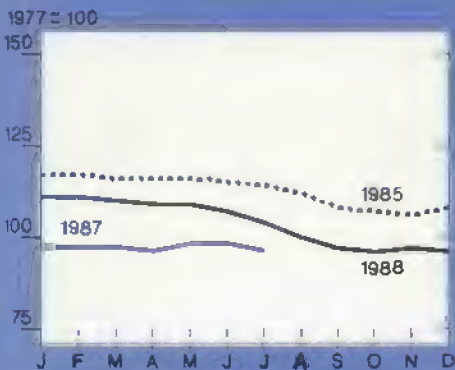
U.S. wheat exports



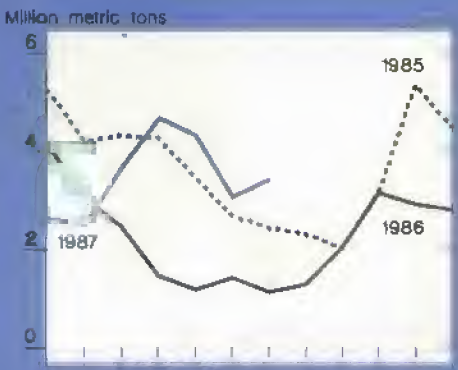
Export volume



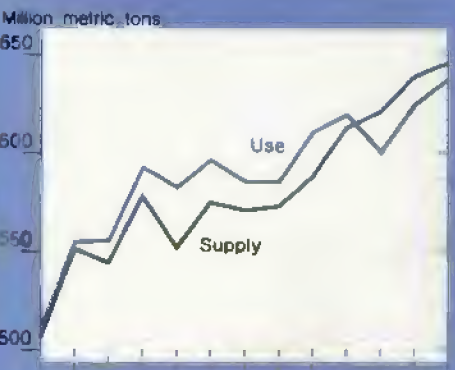
Index of export prices



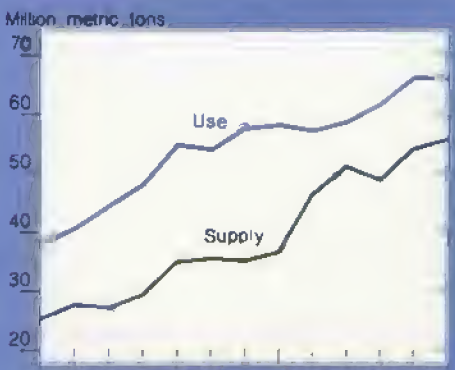
U.S. corn exports



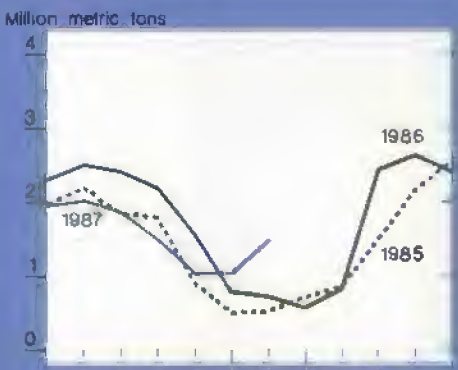
Foreign supply & use of coarse grains



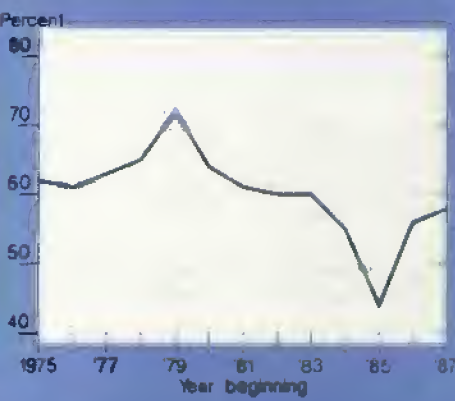
Foreign supply & use of soybeans



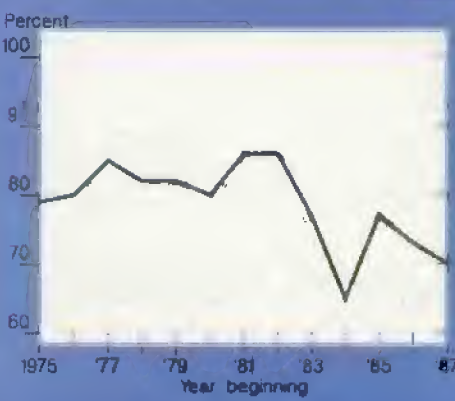
U.S. soybean exports



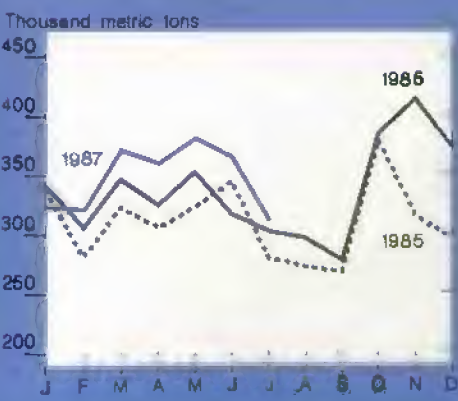
U.S. share of world coarse grains exports<sup>1/2</sup>



U.S. share of world soybean exports



U.S. fruit & vegetable exports<sup>3/</sup>



1/ Excluding intra-EC trade 2/ October-September years. 3/ Includes fruit juices

Growers will likely see their prices fall, too. During the first week in October, extra fancy Red Delicious sold for \$8 to \$10 per 42-pound carton at Yakima, Washington, compared with \$12 to \$14 a year earlier. New York State McIntosh (U.S. fancy 2-1/4 inch) fetched \$7.00, compared with \$8.50 to \$9.00 in 1986. Strong domestic and export demand for fresh apples may mitigate price declines, though.

### ***Citrus Rebounding From Devastation***

Citrus forecasts for 1987/88 indicate the Florida and Texas industries are recovering from the setback caused by killing freezes in the early 1980's.

In Florida, where destructive freezes struck in 1981, 1982, 1983, and 1985, orange production fell to 104 million boxes during 1984/85 (the smallest crop since 1967/68), from 206 million in 1979/80. This year, growers expect to harvest 130 million boxes, up from 119.7 million in 1986/87. Texas growers expect their orange production to reach 1.35 million boxes this season, after no reported production in 1984/85 and 875,000 boxes last year.

The forecast for all U.S. orange production stands at 183.4 million boxes, up from 182.2 million last year. California, the second largest producer, will harvest an estimated 49 million boxes, compared with 58.5 million last year. The California Navel crop will likely fall short of last year because unusually hot weather during May and June caused excessive fruit drop.

Early-season forecasts place Florida's grapefruit production at 51 million boxes, up 2 percent from last season and 14 percent above 1984/85. The Texas grapefruit forecast stands at 3.1 million boxes, up from 1.43 million last season and from no reported production in 1984/85. Texas typically produced nearly 10 million boxes per season before the recent freezes.

### ***Big Crop Forces Potato Prices Down***

A 4- to 6-percent larger 1987 potato crop has resulted from good growing conditions in the fall production areas and more planted acreage during all four seasons. The big crop will likely drive the U.S. growers' average price 10 to 15 percent below last year. The expansion was encouraged by high prices for the 1986 crop.

The fall crop, estimated at 1.09 million harvested acres, will probably sur-

pass last year's area by 5 percent, but drop 5 percent short of 1985. Total planted area for 1987 stands at 1.3 million acres, up 4 percent from last season. Most of the production gain comes from the nine Western States, where an 8-percent increase in harvested acreage will lead to a more than 4-percent larger crop.

The larger crop this year drove shipping point potato prices downward. Idaho Russets sold for 5.75 to 6 cents per pound, f.o.b. Twin Falls, in early October. This was down from 6 to 6.5 cents for the same period last year. Eastern round whites were selling at 6.5 to 6.75 cents, f.o.b. Long Island, compared with 7.75 to 8 cents last fall.

Typically, each 1-percent rise in production drops the grower average price about 4 percent. However, strong export demand for processed potato products and modest size carryover stocks will cushion the price declines.

### ***Lower Prices, Strong Demand Boost Sweetener Deliveries***

Falling prices for high fructose corn syrup (HFCS) and growth in demand for sugar are boosting domestic use of caloric sweeteners, and are likely to lead to record U.S. sweetener consumption in 1987.

Higher sugar deliveries in fiscal 1987 have reversed a 10-year decline. Preliminary estimates suggest that deliveries rose 2 percent to an estimated 7.95 million tons, raw value. Meanwhile, HFCS use continues to grow, although at a much slower pace than during 1975-85. Domestic shipments totaled 2.8 million tons, dry basis, during the first 6 months of 1987, up 4 percent from a year earlier. Although prices strengthened seasonally during the July-September quarter, total HFCS consumption for the calendar year likely will be up 2 percent to about 5.65 million tons.

U.S. sugar production probably will set a record this crop year. The 7.1 million short tons, raw value, forecast for total beet and cane sugar production will exceed the record 1975/76 crop by 2 percent. Higher contracted acreage and enhanced yields contributed to the record production.

Domestic sugar prices softened during late summer as potential 1987/88 domestic sugar production became known and commercial sugar stocks (excluding CCC) rose from last year.

Nearby futures prices for raw sugar (Contract No. 14, c.i.f. duty-paid, New York) peaked at 22.18 cents a pound on August 6, but fell to 21.70 cents by the second week in October.

HFCS prices in first-half 1987 fell to their lowest levels since 1982, as smaller net starch costs and increased competition among producers drove prices down. In the Chicago-West market, HFCS-42 stood at 15.8 cents a pound dry weight, and HFCS-55 at 16.8 cents. The prices represented drops of 8 and 13 percent, respectively, from a year earlier. Prices for HFCS strengthened in the July-September quarter because of higher seasonal demand, especially for use in soft drinks.

### ***Smaller Supplies Push Tobacco Prices Higher***

Smaller total supplies this year have strengthened the 1987/88 tobacco market; supplies are down because of reduced carryover stocks and strong domestic and export demand. Growers are receiving about 6 cents a pound more for flue-cured crop at auction markets this year than last.

Increased acreage and higher yields will push 1987 tobacco output to about 1.23 billion pounds, up 6 percent from 1986. Nevertheless, total supply for 1987/88 will likely decline about 6 percent because beginning stocks were 10 percent smaller than a year earlier.

The flue-cured supply stands at about 2.45 billion pounds, 7 percent smaller than in 1986/87 and equivalent to about 2.7 years' use. Early estimates put the burley supply at 1.75 billion pounds, equivalent to about 3 years' use and down 5 percent from last year. Production of other tobacco types will fall from last year.

World tobacco use, bolstered by growth in demand for cigarettes and unmanufactured tobacco, likely will rise in 1987/88. U.S. cigarette consumption probably will fall about 2 percent this year because of higher prices, rising health concerns, and more smoking restrictions in public places.

The good quality of this year's tobacco and manufacturers' stated commitment to use more U.S.-grown tobacco in their cigarettes have strengthened domestic demand. In addition, the less expensive dollar is making U.S. tobacco and cigarettes cheaper in the world market, which may boost export demand. [Glenn Zepp (202) 786-1767]





## Commodity Spotlights

### Turkey: From Holiday Treat To Year-Round Meat

Turkey, a fast-growing component of the U.S. consumer's meat diet, has moved from being primarily a holiday feature to year-round use. The turkey industry is growing through continued development and marketing of new products. The industry has expanded rapidly in recent years. But this expansion, coupled with growth in broiler and red meat production, could threaten turkey industry profitability.

Turkey production, processing, and marketing are concentrated; the 20 largest turkey firms slaughter about 80 percent of all turkeys. Turkeys are raised on big, specialized farms, generally under a marketing or production contract for an integrated turkey processing company.

Production is located in many States, but three produced about 43 percent of the 4.1 billion pounds of live-weight turkey raised in 1986. North Carolina produced the largest volume, followed by Minnesota and California.

While turkey is a relatively small component of total poultry and meat consumption, it is rapidly becoming more important. Of the 214.3 pounds of red meat and poultry (retail weight) consumed per capita in 1986, turkey contributed 13.4 pounds, or 6.3 percent.

Turkey Production, 1960-88, with Comparisons-

Year	Turkey production Billion pounds	Turkey Pounds per capita	Total poultry Pounds per capita	Total red meat Pounds per capita
1960	1.2	6.1	34.0	168.0
1965	1.5	7.4	40.7	176.6
1970	1.7	8.0	48.4	200.0
1975	1.8	8.4	48.6	192.3
1980	2.4	10.4	60.6	208.2
1985	2.9	12.2	70.1	214.6
1987 (est.)	4.0	15.1	78.0	215.1
1988 (est.)	4.1	16.9	82.8	221.7

\*Retail weight

Turkey Consumption Over Four Quarters

Year	Share of annual per capita consumption			
	I	II	III	IV
	Percent			
1960	8.2	13.1	21.3	57.4
1970	11.2	11.2	26.3	51.3
1975	13.1	16.7	22.6	47.6
1980	17.3	19.2	25.0	38.5
1982	16.5	19.3	24.8	39.4
1984	17.5	19.3	23.7	39.5
1986	17.9	18.6	23.9	39.6
1987	17.3	20.0	24.7	38.0

Estimated Net Returns on Turkeys, by Quarter

Year	I	II	III	IV
	Cents per pound			
1984	-2.8	-0.2	5.7	22.5
1985	7.7	4.7	18.2	30.8
1986	1.3	11.7	22.0	19.8
1987	.5	2.3		

Estimates for 1987 consumption are 15.1 pounds per capita, or 7 percent. Per capita consumption of turkey has increased 150 percent since 1960, and 50 percent since 1980.

U.S. turkey production has grown steadily since 1960, from 1.2 billion pounds (retail weight) to an estimated 4.0 billion in 1987. The production increase during 1983-87 for turkeys was 44.5 percent, the largest gain of all meat and poultry products.

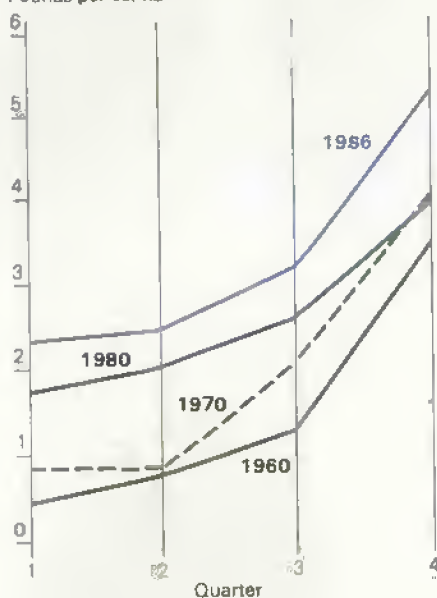
Total production in 1987 is forecast to be 17 percent above 1986, and 1988 production is estimated to be 6-7 percent greater than in 1987. The slower

rate of growth in 1988 reflects expected adjustments to losses associated with large production levels and record cold storage inventories. Beginning fourth-quarter stocks are expected to be at a record 620 million pounds, 17 percent above a year ago.

Falling costs of production and increased demand are the primary factors behind the expansion in turkey production and consumption. Expansion has been aided by the development of new turkey products: turkey hams, turkey salamis, and turkey franks. Such further-processed products accounted for 44 percent of all turkey produced in 1985.

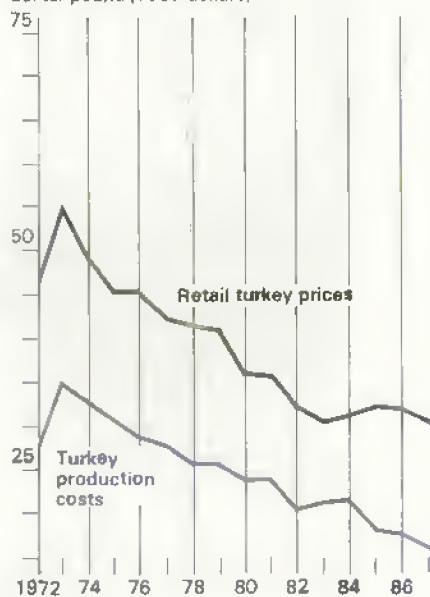
## Turkey Use Still Highest for Holidays, But Total Use Up Substantially

Pounds per capita



## Retail Turkey Prices Follow Drop in Production Costs

Cents/pound (1967 dollars)



An examination of turkey consumption quarter by quarter shows that it is spread throughout the year, not just concentrated at Thanksgiving and Christmas. Currently, about 37 percent of turkey is used in the 1st and 2nd quarters, up sharply from 21 percent in 1960. Alternatively, each person now consumes almost as many pounds of turkey in the first half of the year as during the entire year in 1960. While consumption still peaks in the fourth quarter, there has been a steady increase in the base level of turkey consumption throughout the year.

Lower feed and energy costs in the 1980's contributed to lower turkey production costs. In constant dollars, the real cost per pound to produce turkey declined about 30 percent from 1980 through 1985.

Expansion of turkey production has been encouraged by favorable net returns. ERS estimates of net returns per pound of ready-to-cook turkey have been positive since the third quarter of 1984.

However, projected large supplies of turkeys as well as other meats could become burdensome. Accelerated product development and marketing efforts, as well as production adjustments, will be required to maintain high levels of consumption and profitability within the industry. [Lee Christensen (202) 786-1820]

## Rice Price Rises as World Supplies Tighten

World milled rice production in 1987/88 is forecast down 4.5 percent from 1986/87 to 302 million tons. South and Southeast Asian production was hurt by late and weak monsoons. U.S. production is projected down because of reduced acreage and lower yields, particularly for long grain rice.

U.S. domestic use is rising, and domestic needs will compete with export demand for available supplies. Reduced exportable foreign and U.S. supplies and rapidly rising prices may reduce world trade to its lowest level in a decade.

Production shortfalls in major rice-producing regions are expected to reduce export availabilities. World rice trade is forecast to fall to 10.2 million

tons in calendar 1988, 16 percent below the 1987 forecast and the lowest since 1978.

Foreign production is expected to be down 14 million tons to 297 million. While China, the world's largest producer, is forecast to produce its second largest crop, sharp declines are projected in several South and Southeast Asian crops.

Severe drought is expected to reduce India's crop 22 percent from 1986/87, to 47 million tons. Heavy flooding in Bangladesh may cause a 7-percent decline from 1986/87, to 14.3 million tons. While India will help meet its shortfall by drawing down grain stocks, Bangladesh is expected to boost its 1987 rice imports to 900,000 tons, up from less than 100,000 in 1986.

Some of the countries affected by the weak monsoon are major exporters. Thailand is expected to harvest its second consecutive drought-reduced crop. Thailand's forecast production, at 10.4 million tons, is down 12 percent from 1986/87. Pakistani output is expected to be down 12 percent to 3.1 million tons.

These forecast production shortfalls among the major rice exporters are shrinking exportable supplies, particularly of long grain rice. Export prices are rising. The U.S. world market price for long grain rice (rough basis) has risen 66 percent since August 4 to \$6.32/cwt (as of October 13). Nominal Thai f.o.b. prices for a similar grade have risen 69 percent since July to \$279/ton, milled basis (as of October 13). This is 55 percent above a year ago. World supplies are expected to remain tight, at least until the 1988/89 U.S. and Thai crops are harvested.

The high price of rice is expected to significantly affect import demand. The European Community and some of the wealthier countries in the Middle East and Asia may show little change in rice imports despite higher prices. However, some of the poorer countries may curtail their imports. Others may switch to lower grades of rice or substitute wheat imports.

The United States will be a good source of supply for wheat and the medium and short grades of rice, but it will not be able to fill the supply gap for long grain rice, where much of the world's demand lies. With U.S. long grain rice production in 1987/88 projected down 11 percent and carryin

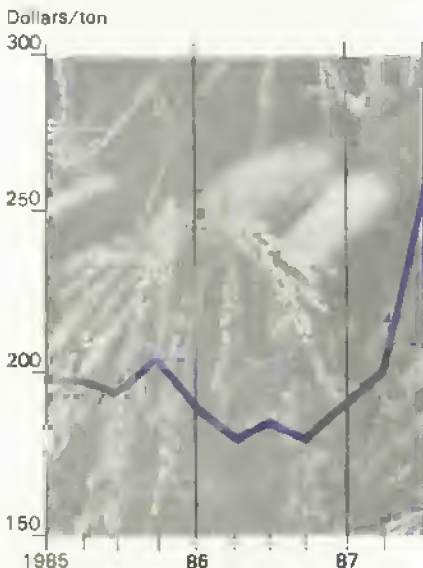


# Rice Production, Consumption, and Trade in Major Exporting Countries\*

	1986/87 P			1987/88 F		
	Production	Consumption	Exports	Production	Consumption	Exports
-----Million metric tons-----						
U.S.	4.3	2.4	2.3	4.1	2.5	2.6
Thailand	11.9	8.6	3.9	10.4	8.6	2.0
Pakistan	3.5	2.3	1.4	3.1	2.2	1.0
Burma	7.8	7.3	0.5	8.4	7.9	0.5
China	119.8	119.2	1.0	123.2	122.1	1.2
Australia	0.4	0.1	0.4	0.5	0.1	0.4
EC-12	1.3	1.5	1.0	1.3	1.5	1.0
World	315.7	319.4	12.2	301.5	311.7	10.6

\*Milled basis. Exports reported on a calendar year, excluding intra-EC trade. P = preliminary, F = forecast.

## Rice Prices\* Begin Rising



\*Calendar year, quarterly averages, Thai f.o.b. long grain rice, 100 percent B grade. The last data point is September 1987.

stocks down 39 percent from last year, U.S. long grain supplies will be down 20 percent. Limited U.S. availability will therefore constrain exports. Although the calendar 1988 export forecast for all rice is 2.6 million tons, 300,000 above 1987, much of that increase will have to come from medium and short grain supplies.

China and Australia may be the only other countries in a position to expand exports. Given projected high prices and ample supplies, China may choose to increase rice exports to 1.0-1.1 million tons. The Australian planting

season is about to begin, and the prospect of high harvest-time prices may encourage farmers to expand acreage and production.

Australian output is forecast at over 500,000 tons, and exports in calendar 1988 could reach 400,000, up from a forecast 350,000 in 1987. China exports mostly low-quality, long grain rice, and Australia primarily exports medium and short grain varieties. Neither country will be able to supply significant quantities of rice to the high-quality, long grain markets.

## Acreage Cut, Lower Yields Drop U.S. Production

Based on October estimates, 1987 U.S. rice production is forecast to decline to 4.1 million tons (milled basis), down from 4.3 million in 1986. Long grain output is expected to fall 11 percent, while medium grain production is forecast up 10 percent and short grain up 4 percent.

For the third year in a row, U.S. producers have reduced acreage planted to rice. Consequently, harvested area has dropped from 2.8 million acres in 1984/85 to 2.3 million in 1987/88. High participation in Government programs, which required 35 percent of base acreage to be removed from production, has been responsible.

While acreage has declined, yields have moved rapidly upward during the 1980's because of adoption of higher yielding varieties. However, disease problems such as blast and sheaf blight were a serious problem this

year, particularly in Arkansas, where 40 percent of the U.S. crop is produced. In addition, unseasonably cool weather in Texas and California during critical stages of development lowered expected yields. As a result, yields may fall 3 percent from last year's high.

The full impact of the marketing loan, which drastically reduced U.S. prices, was felt in 1986/87, when total use increased by 28 percent. As a result, carryin stocks of all rice on August 1 were 29 percent lower than a year earlier. With lower production and carryin stocks, 1987/88 supply may fall 14 percent to 5.9 million tons. This would be just 0.4 million tons above the sharply reduced supply in 1983/84—the year of PIK and reduced yields.

Relatively low supply combined with strong demand is expected to lower 1987/88 carryout stocks by an astounding 50 percent to about 0.9 million tons, just under the 1 million targeted by the 1985 Food Security Act as necessary to maintain adequate supplies for domestic and export use. Stocks of long grain will be critically tight, possibly running as low as 200,000 tons. Around 70 percent of U.S. rice traded on world markets and consumed domestically is long grain. (Sara Schwartz (202) 786-1691 and Janet Livezey (202) 786-1840)

## Vegetable Use Up, Especially Fresh

Processing vegetable markets have changed significantly over the past 16 years; use of vegetables for canning has declined, while use of vegetables for freezing has risen. Over the same period, Americans have begun to eat a wider variety of fresh vegetables, and fresh use has grown dramatically.

Changes in population, income, and tastes and preferences have caused the demand shift.

The older people get, the more vegetables they eat. The median age of the population is rising, and the immigration rate is projected to increase slightly faster for the 10 years ending in 1995 than in the previous 10 years. The increased ethnic population, coupled with a higher average age, will raise the total demand for vegetables. The influx of immigrants has increased the demand for vegetables.

Often, immigrants' diets consist of a higher proportion of vegetables than the typical U.S. diet.

The demand for vegetables is more responsive to income changes than demand for other food items, according to ERS studies. A 10-percent increase in income raises expenditures for vegetables 2.4 percent, compared with 1.93 percent for fruits and 2.3 percent for beef. With additional income, consumers buy more fresh vegetables first, then frozen, and then canned.

Consumers' tastes and preferences are difficult to measure, but proxies can be used to quantify cultural habits and convenience factors. Tastes and preferences have shifted toward fresh vegetables, with use of the 10 major fresh vegetables growing an average of 1 percent annually between 1970 and 1986. The growth is partially attributable to increasing concern about health; certain vegetables are said to prevent cancer.

Further growth in fresh vegetable use will come from the increased availability of more types of vegetables. Not included in projected increased fresh use is the greater availability of exotic vegetables, whose consumption is also rising.

Processing use (excluding dehydrated) has grown less than 1 percent per year since 1970, with tomatoes accounting for about 62 percent of the total growth. Use of freezing vegetables has grown 2 percent per year over the past 16 years, while canning use, excluding tomatoes, has fallen 1 percent per year.

Demand for processing vegetables is expected to continue growing through the end of this century, though at a slower rate than over the past 16 years. Fresh vegetable use is enhanced by the increased consumption of food away from home, and by the popularity of salad bars in restaurants and retail stores.

### Broccoli, Cauliflower Output Up

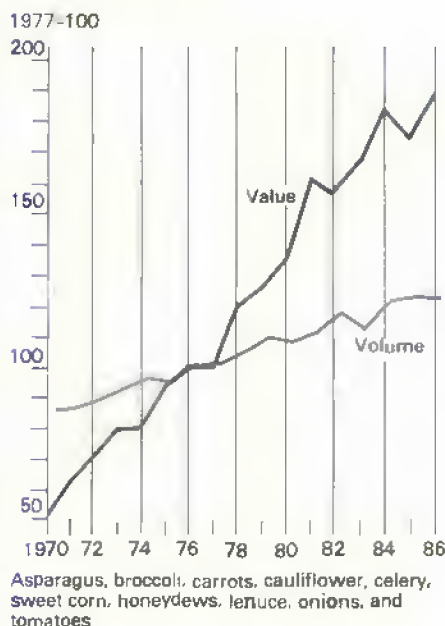
Production of the major fresh and processing vegetables grew from 31.9 billion pounds in 1970 to 44.5 billion in 1986. In 1986, the value of vegetable production totaled \$4.1 billion and accounted for 7 percent of cash receipts from crops.

Use of Fresh & Processing vegetables

Period	Fresh 1/	Processing	
		Canning 2/	Freezing 3/
---Pounds per capita (farm weight equivalent)---			
1970-75	72.3	88.4	13.4
1976-80	77.4	92.0	14.7
1981-85	84.1	82.3	16.1
1986-90 F	125.0	83.0	29.0

1/ Includes asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes green beans, sweet corn, green peas, & tomatoes. 3/ Includes asparagus, green beans, broccoli, carrots, cauliflower, sweet corn, & green peas. F = forecast.

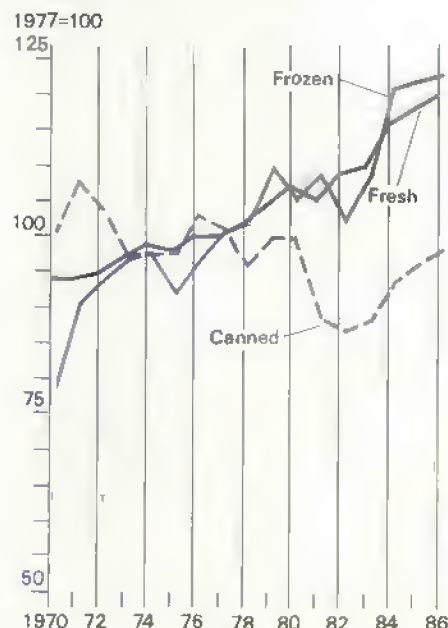
Rising Prices Push Up Value of Fresh Vegetable Output



Vegetables showing the most rapid increase in production were the less traditional ones, such as broccoli and cauliflower. Output of broccoli grew an average of 8 percent per year over the 16-year period ending in 1986, with a sevenfold increase in market value to \$227 million. Cauliflower production grew an average of 7 percent a year, while value increased ninefold to \$189 million in 1986.

Production of the remaining eight fresh-market vegetables rose less rapidly. Tomatoes increased an average of 3.4 percent per year over the 16-year period. This was followed by onions at 2.1 percent, lettuce at 1.5, and carrots at 1.3.

Consumers Shift to Frozen & Fresh Vegetables



As fresh vegetable production expanded in response to stronger demand, farmers began growing vegetables in less traditional areas. Land devoted to fresh vegetables spread to the Eastern States, even though production remained concentrated in the West.

In the past several years, some Virginia farmers have shifted part of their tobacco acreage into broccoli. Through their cooperative, these farmers have installed an icing and packaging facility and have been increasing broccoli acreage. Some Maine potato farmers are currently growing broccoli. Because of lower transportation costs, these growers can sell broccoli to eastern markets for less money than California growers.



## Processing Acreage Stagnant

In contrast to fresh vegetable expansion, acreage devoted to processing vegetables has remained at about 1.3 million since the mid-1970's. However, acreage for canning fell from 80 percent of total processing acreage in 1970 to 73 percent in 1986, as acreage for freezing rose. Processing vegetable production was widely dispersed prior to 1970. Since then, production has largely moved to the North Central and Western regions. California dominates the processing industry—mainly in tomatoes—with an average 60 percent of the U.S. processing market.

As use of some canning vegetables declined, the industry not only shifted acreage into freezing, but scrambled to renew demand for canned products through advertising.

The freezing industry is expected to continue growing as demand rises and most freezers expand acreage. For example, acreage of snap beans for freezing rose about 1 percent per year between 1970 and 1986, while canning fell an annual average of 2 percent. Use of snap beans for freezing rose about half a percent per year over the 16-year period, while snap beans for canning fell about 1 percent per year. The freezing industry likely will experience continued strong demand through the end of this decade because of the growth in convenience foods.

What changes are apparent at the producer level? The increased production of the 10 major fresh-market vegetables is coming from States not traditionally considered vegetable producers. One reason is the value of the vegetable crop. Farms classified as vegetable farms, constituting 27,000 farms or 1.2 percent of all farms in 1986, earned 10 percent of net cash income.

Continued strong demand for vegetables likely will further stimulate entry of new producers. However, the industry felt pressure in recent years as vegetable supplies from foreign sources also grew.

## Vegetable Imports Growing

Vegetable growers are concerned about the role of imports for all major vegetables. Fresh-market imports grew an average 3 percent over the past 16 years, while processed imports grew 4 percent. Imports play a larger

role in the fresh market than in the processing market, because more types of fresh-market vegetables are imported. Annual fresh imports of the 10 major vegetables account for about 5 percent of fresh supply, while processed imports account for about 4 percent of the four major processing vegetables.

Imports made up only about 4 percent of total 1986 vegetable supplies. However, on a regional and seasonal basis, imports sometimes play a much larger role. Imports from Mexico, mainly from January through May, boost seasonally low supplies of the major winter fresh vegetables (snap beans, cucumbers, eggplant, green peppers, squash, and tomatoes). During the winter season (October-June), Florida supplies the United States with approximately half of the winter fresh vegetables.

Growth in fresh-market vegetable imports is partially in response to retailers' efforts to expand produce sections and offer more products on a year-round basis. The small import gain is also attributable to legislation to promote duty-free imports from the Caribbean countries. Importers benefited from the strong dollar that prevailed in the early 1980's, but that has changed during the past 2 years.

Processed imports consist primarily of tomato products, which have benefited from the growth in ethnic foods. In general, a less expensive dollar would lead to reduced vegetable imports. But, the fresh vegetable imports come primarily from Mexico, where the dollar has not weakened. These fresh imports likely will continue to increase through the end of this decade to meet expanding demand.

Recent concerns have centered on the levels of pesticide residues in fresh vegetables. Two new studies by the General Accounting Office found that both domestic and imported supplies of fresh vegetables contained residues of pesticides above the FDA-set standards. Between 1979 and 1985, the Food and Drug Administration (FDA) collected domestic and imported food samples and found that 2.9 and 6.1 percent, respectively, contained levels of pesticide residue above tolerance.

However, FDA's sampling procedure is limited and further sampling likely will indicate more statistically significant results. More stringent pesticide

sampling probably will slow imports in the short run and ultimately lead to higher prices for fresh vegetables.

Despite this, the growth in vegetable demand likely will continue through the end of this century. Larger supplies will be provided mainly by domestic producers, though foreign supplies will continue to be ample.

States not traditionally in the vegetable business but looking for more profitable crop alternatives will help boost supplies and increase U.S. competition. However, these States and importers probably will also face the largest adjustment during oversupply periods. [Shannon Hamm (202) 786-1767]

## Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the December *Agricultural Outlook* comes off press.

### November

- 2 Poultry Slaughter
- Egg Products
- 3 Dairy Products
- 6 Celery
- 9 Crop Production
- 13 Turkey Hatchery
- Milk Production
- Farm Labor
- 16 Sugar Market Statistics
- Cattle on Feed
- 20 Catfish
- Cold Storage
- Livestock Slaughter
- 24 Eggs, Chickens, & Turkeys
- 27 Peanut Stocks & Processing
- 30 Agricultural Prices



## Farm Finance

### PRODUCTION COSTS DOWN FOR '87, RISING FOR '88

According to preliminary estimates, the cost of producing major U.S. crops in 1987 is down slightly from 1986, because fertilizer and chemical expenses continued down during much of the year. However, prices have begun to increase, and 1988's costs are expected to be above 1987's.

Energy costs likely will rise the most, averaging 4.9 percent over 1987, followed by autos and trucks, and seed. The composite index for prices paid next year for all production items, including wages, taxes, and livestock inputs, could increase 1.3 percent (the percentages in this article are estimates and actual changes could range around the values given here).

Per planted acre, variable cash expenses (seed, fertilizers, chemicals, etc.) should increase from 1.1 percent (cotton) to 4.3 percent (rice) in 1988. Fixed cash expenses are expected to rise 4.5 to 5.2 percent, with little variation among crops; total cash expenses show increases from 2.0 to 4.5 percent.

Per-acre rice production cost gains will be largest mainly because of higher forecast yields. These yield increases, coupled with higher fuel costs, will

Forecast U.S. Production Costs for 1988\*

	Corn	Grain sorghum	Barley	Oats	All wheat	Rice	Soybeans	Peanuts	Cotton
\$/planted acre									
Cash expenses									
Seed	17	4	8	6	6	25	9	78	8
Fertilizer	43	17	13	9	14	30	6	17	19
Lime & gypsum	2	1	--	1	--	0	1	14	1
Chemicals	18	9	6	1	3	6	19	30	49
Custom operations	7	4	3	2	5	50	4	8	14
Fuel, lube, & elect	10	12	6	4	7	28	6	18	20
Repairs	12	10	9	6	8	30	7	19	19
Hired labor	2	2	1	1	1	17	2	6	11
Purchased irr. water	--	--	--	0	--	20	0	0	6
Drying	6	1	0	0	0	41	0	43	0
Ginning	0	0	0	0	0	0	0	0	51
Miscellaneous	--	--	1	1	--	0	--	--	1
Technical services	1	--	--	--	--	6	--	1	2
Total variable expenses	119	60	45	32	45	253	52	297	203
(Percent change from 1987)	(2.1)	(1.9)	(2.3)	(2.5)	(2.4)	(4.3)	(1.7)	(7.5)	(1.1)
General farm overhead	16	8	8	5	8	24	11	30	23
Taxes & insurance	18	11	10	15	9	15	14	13	11
Cash interest	38	15	16	14	18	36	28	60	34
Total fixed expenses	73	34	35	34	32	75	54	103	68
(Percent change from 1987)	(4.6)	(4.6)	(4.3)	(4.4)	(4.7)	(5.2)	(4.5)	(4.6)	(4.8)
Total cash expenses	192	94	81	66	77	328	106	400	271
(Percent change from 1987)	(3.0)	(2.9)	(3.3)	(3.8)	(3.4)	(4.8)	(3.1)	(2.3)	(2.0)
Capital replacement	37	29	25	18	21	56	27	54	45

\*Forecast costs are as of 08/01/87. Totals may not add because of rounding.  
-- = less than 50 cents.

Forecast of Prices Paid

	Change from year earlier	
	1987	1988
	Percent	
Production items:		
Seed	.4	2.9
Fertilizer	-6.1	1.6
Ag. chemicals	-2.0	.2
Fuels & energy	2.9	4.9
Farm & motor supplies	1.1	1.9
Autos & trucks	5.4	4.4
Tractors & special purpose machinery	0	1.9
Other machinery	0	2.2
Building & fencing	.5	.9
Farm services & rent	-1.5	2.0
All production items	.9	1.6
All items inc. wages & taxes	1.0	1.3



raise rice drying costs 10 percent. Cotton costs probably will increase the least of all major crops because of projected lower 1988 yields.

Expenses for capital replacement—investment in buildings and machinery—are increasing an average 3.6 percent, mainly because of the steady rise in the cost of tractors and trucks.

The price index and production cost forecasts come from ERS's cost-of-production project. The production costs are forecast by taking 1986 cost estimates as a base and applying the general price index changes as inflators. The underlying assumption is that input quantities remain fixed and production costs change as input prices change.

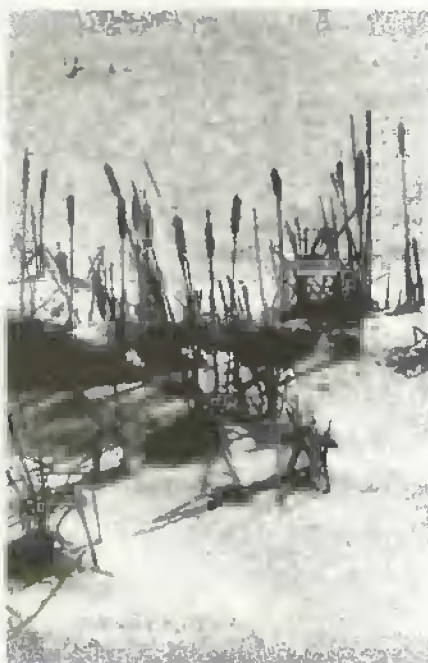
The cost estimates are subject to revision as the crop year progresses. In late summer, analysts felt that input costs would move as shown, but that the underlying factors could change. The estimates are national; individual farmers' costs may differ.  
[Bob McElroy (202) 786-1801]

## Upcoming Economic Reports

Summary Released	Title
<b>November</b>	
4	Livestock & Poultry
6	Vegetable Yearbook
9	World Ag. Supply & Demand
12	Farm Income
13	Cotton & Wool
17	Fruit
18	Agricultural Outlook
20	Feed Yearbook
23	World Agriculture

## December

1	Exports
4	Econ. Indicators of the Farm Sector
10	World Ag. Supply & Demand
15	Tobacco Yearbook
17	Econ. Indicators of the Farm Sector
18	Agricultural Outlook
	Foreign Ag. Trade of the U.S.
21	Rural & Ag. Finance



## Resources

### CRP HALFWAY TO GOAL

The most recent signup period for the Conservation Reserve Program (CRP), in July 1987, brought total signup to over 200,000 contracts covering almost 23 million acres. Contracts have been signed to retire about 2 million acres in fiscal 1986, 13.4 million in fiscal 1987, and 2.3 million in fiscal 1988.

During the July signup, 0.4 million acres for 1987 and 4.9 million for 1988 were accepted by USDA, but as yet they have not been contracted. Typically, about 7 percent of the acres accepted are not contracted.

Rental rates increased steadily from just over \$42 per acre in the first signup period to over \$51 by the fourth, then dropped to \$48 in the most recent period. Much of the increase can be explained by changes in the geographical location of the acreage bid, and by farmers' increasing knowledge of their area's maximum acceptable rental rate, or bid cap.

For instance, following the first three signup periods, enrollment in the Corn Belt—where bid caps are highest—was only about 9 percent of the U.S. total. After the fourth signup, though, the Corn Belt accounted for over 15 percent. Enrollment in the Mountain region, where bid caps are relatively

low, was over 27 percent of total U.S. enrollment following the third signup, but dropped to 21 percent after the fourth signup.

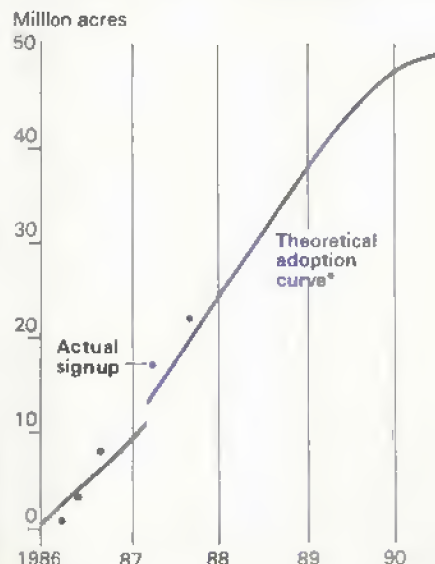
### 480 Million Tons of Soil Saved from Erosion

Annual erosion savings continued to decline, from 27 tons per acre in the second signup period to 19 tons in the fourth signup. The average for all acres enrolled to date is just over 21 tons per acre. Thus, the 23 million acres enrolled provide erosion savings of roughly 480 million tons annually.

The erosion savings are obtained by establishing permanent cover or implementing other specific soil conservation practices on the enrolled acreage. About 85 percent of the acres enrolled are to be covered with grass or legumes—about one-third of these native species. A little more than 5 percent will be placed in trees. About 4 percent will be used for wildlife habitat, while the remainder is already in grass or legumes or other conservation practices.

Participation in the CRP continues to be highest in the Northern Plains, Southern Plains, Mountain, and Pacific regions. The Mountain region enrolled over 51 percent of its available acreage (eligible acreage is constrained by the 25-percent per county limit unless an exception has been provided).

### CRP Signup Strong But Slowing



\*Upward shift in theoretical adoption curve is due to expanded eligibility criteria adopted in February 1987.

Distribution of Counties at Various Levels of Enrollment,  
Using Different Cropland Measures

	Percent of total cropland enrolled							
	<6.2	6.3-12.4	12.5-18.7	18.8-24.9	25.0-31.2	31.3-37.5	37.6-43.7	43.8-49.9   50.0
	Number of counties							
Total Cropland	1,750	330	126	71	30	12	4	1
Cropland pasture	1,631	357	143	99	55	26	10	2
Harvested cropland	1,547	352	159	98	64	34	27	16

Regional Signup in the Conservation Reserve, 1986 & 1987

Region	Total cropland	Harvested cropland	Available acres*	Area enrolled	Available acres accepted	Harvested acres accepted	Av. bid cap	Cash rent	CRP rental rate	Bid/rent	Bid cap/rent
		Thous. acres			Percent		\$/acre			Ratio	
Northeast	17,268	12,899	3,054	99.6	3.3	0.8	60	37	57	1.5	1.6
Appalachian	22,555	17,278	4,870	758.6	15.6	4.9	55	41	54	1.3	1.3
Southeast	18,449	13,387	2,865	989.2	34.5	7.4	45	29	42	1.4	1.6
Delta States	21,909	17,911	2,622	678.3	25.9	3.8	42	39	43	1.1	1.1
Corn Belt	92,421	82,353	16,582	3,269	19.7	4.0	72	83	69	0.8	0.9
Lake States	43,961	37,024	5,580	1,983.3	35.5	5.4	61	54	58	1.1	1.1
Northern Plains	93,633	71,665	12,857	5,194.5	40.4	7.2	49	31	47	1.5	1.6
Southern Plains	44,819	29,687	9,229	3,734.2	40.6	12.6	40	23	40	1.7	1.7
Mountain	43,219	25,704	9,371	4,791.7	51.1	18.6	41	19	41	2.2	2.2
Pacific	22,683	15,788	3,313	1,439.4	43.5	9.1	50	39	49	1.2	1.3
U.S.	420,917	323,697	70,343	22,946.5	32.6	7.1	50	46	49	1.1	1.1

\*Eligible acreage constrained at 25 percent of county acreage.

Signup for the Conservation Reserve Program

	Number of contracts	Number of acres	Cumulative acres	Av. rental rate	Av. erosion rate
	1,000	1,000	1,000	\$/acre/year	Tons/acre/year
Signup periods					
#1 March 1986	9.4	750	750	42.06	26
#2 May 1986	21.4	2,770	3,530	44.05	27
#3 August 1986	34.0	4,700	8,230	46.96	25
#4 February 1987	88.0	9,480	17,710	51.19	19
#5 July 1987*	49.1	5,290	23,000	48.08	NA*
Crop year					
1986	21.0	2,040	2,040	43.11	28
1987*	126.4	13,810	15,850	50.01	22
1988*	54.7	7,150	23,000	46.96	17

\*Preliminary estimates.

The next highest level of participation occurs in the Pacific region, with over 43 percent of the available acreage enrolled, followed by the Northern and Southern Plains with just over 40 percent. Participants in the Northern Plains enrolled the greatest absolute amount, about 5.2 million acres, followed by the Mountain, Southern Plains, and Corn Belt regions with 4.8, 3.7, and 3.3 million acres, respectively.

The percentage of cropland enrolled and the concentration of participation have a greater impact on the local, State, and regional economies than total acreage enrolled or the level of participation. The higher the percentage of cropland enrolled, and the greater the regional concentration, the greater the impact.

Only 576 of the 3,026 counties in the United States enrolled more than 6 percent of their total cropland in the



# Cover Establishment Types

	1986		1987 1/		1988 1/		Total	
	Acres	Cover cost	Acres	Cover cost	Acres	Cover cost	Acres	Cover cost
	1,000	\$/acre 2/	1,000	\$/acre 2/	1,000	\$/acre 2/	1,000	\$/acre 2/
Grasses & legumes	1,591.0	39	11,528.6	40	2,087.6	42	15,207.6	40
Trees	191.0	43	677.6	37	67.8	34	936.4	38
Wildlife habitat	126.1	43	481.8	41	83.2	45	691.1	42
Windbreaks	1.0	249	2.5	145	0.2	163	3.7	174
Diversions	9.9	18	25.9	16	7.9	4	43.7	14
Erosion control structures	7.8	34	21.8	47	0.6	76	30.2	44
Grass waterways	2.0	138	5.5	185	0.6	104	8.1	167
Ponds	0.2	878	0.7	449	0.1	1,009	1.0	591
Water control structures	1.6	34	0.1	265	--	--	1.7	48

1/ Preliminary estimates. 2/ Average Government share of cover establishment cost.

**CRP.** Of these counties, 49 enrolled more than 25 percent of their total, based on total cropland estimates from the 1982 Census of Agriculture.

However, total cropland includes land used to produce hay, fallowed and idled land, and land where crop production failed. Because economic activity is based upon the volume of crops produced and marketed, the percent of harvested cropland enrolled may be a better indicator of the magnitude of the impact.

Some 779 counties have enrolled more than 6 percent of harvested cropland, while 170 of these counties have enrolled more than 25 percent. Texas has 37 counties, or about 20 percent of its counties, with more than 25 percent of harvested cropland enrolled.

Other States with a large number of counties enrolling more than 25 percent of harvested cropland include Colorado (15), Mississippi (13), Montana (11), and Kansas (10). Although New Mexico has only 7 counties with more than 25 percent of harvested cropland enrolled, these counties represent half the agricultural cropland in the State. Thus, the States just listed are likely to feel the greatest impact on their economies.

Two factors are primarily responsible for the concentration within States and regions. First, participation is greatest in areas with the greatest amount of eligible (highly erodible) cropland. The Corn Belt and Northern Plains regions have the most eligible cropland, over 40 percent of the U.S. total.

However, the Mountain and Southern Plains regions, which have the third and fourth most eligible cropland, have the highest proportion of eligible to harvested cropland, with 36 and 31 percent, respectively.

## Payment-to-Cash Rent Ratio Strongly Influences Participation

The second factor strongly influencing participation is the annual rental payment relative to the average cash rent in the area. The larger the annual rental rate compared with the average cash rent, the greater the participation.

To encourage participation in the program, the annual CRP rental payment must be at least as high as the cash rent a producer currently receives. This annual payment must cover the cash rent lost by enrolling, the cost of establishing and maintaining a permanent cover, and the risk associated with accepting a rental payment that will be less than future earning potential of the land. The average establishment cost is about \$40 per acre, with an annual maintenance cost of about \$12 per acre.

In general, participation is higher than the national average when the ratio of the annual CRP rental rate to average cash rent is 1.5 or greater. Exceptions to this occur in the Northeast and Pacific regions, as well as Minnesota and North Dakota.

Clearly, the continued increase in cash rents and land values in the Northeast region provides an explanation for that area's failure to follow the rule of

thumb. Minnesota's Reinvest in Minnesota (RIM) conservation program, with State inducements augmenting Federal payments, may explain its heavy participation with lower bid-to-rent ratios.

The next (sixth) signup is scheduled in February 1988. [Michael Dicks (202) 786-1401]

## SURVEY SHOWS LAND VALUES STABLE TO HIGHER

Surveys of rural appraisers show renewed confidence in the farmland market. The August 1 survey showed that 64 percent of rural land appraisers felt land values were stable from May 1 through July 31, 22 percent thought values had increased, and only 14 percent believed values had declined.

The same survey taken on May 1 showed 57 percent believed values had not changed between February 1 and April 30. Ten percent said values had increased, and 33 percent felt values had declined. Both the May and the August surveys indicated an increasing number of land sales.

## Northeast & North Central Doing Better Than South & West

Survey results vary by region. In both May and August, a higher proportion of respondents in the Northeast and North Central regions reported increases in value than in the South and West.

Similarly, the Northeast and North Central appraisers are more optimistic than those in the South and West.

## Rural Appraisers' Survey on Land Values\*

### Survey & Period

#### AUGUST 1, 1987 SURVEY

	Percent of respondents reporting that values have:		
	Increased	Not changed	Decreased
May 1-July 31, 1987	22	64	14
Percent of respondents expecting values to:			
	Increase	Remain the same	Decrease
Aug. 1-Oct. 31, 1987	16	72	12
Aug. 1, 1987-Aug. 1, 1988	47	37	16

#### MAY 1, 1987 SURVEY

	Percent of respondents reporting that values have:		
	Increased	Not changed	Decreased
Feb. 1-Apr. 30, 1987	10	57	33
Percent of respondents expecting values to:			
	Increase	Remain the same	Decrease
May 1-July 30, 1987	10	64	26
May 1, 1987-May 1, 1988	25	42	32

\*Rural appraisers surveyed were members of the American Society of Farm Managers and Rural Appraisers. More than 500 appraisers participated in the survey.

More than half the appraisers in the North Central region expected an increase in the 12 months following the survey (August 1, 1987, to August 1, 1988), and only 10 percent expected values to fall.

The results of the surveys tend to confirm the opinions of bankers in first- and second-quarter surveys by the Federal Reserve banks of Chicago, Minneapolis, Kansas City, and Dallas. The Chicago bank, covering Iowa and parts of Illinois, Indiana, Wisconsin, and Michigan, reported a 2-percent increase in values in the second quarter, and no change in the first.

Minneapolis surveys, which included the Dakotas and Montana as well as Minnesota, showed that while second-quarter values were lower in 1987 than in 1986, nearly all of the decline occurred in the latter half of 1986.

The Kansas City bank (Kansas, Nebraska, Oklahoma, northern New Mexico, and western Missouri) reported an increase of 1.2 percent in the second quarter, after a very small rise in the first quarter. In the Dallas district, encompassing Texas, southern New Mexico, and northern Louisiana, values of dry and irrigated cropland fell 1 percent in the second quarter, while ranchland values were steady.

### Citrus Acreage Values Up

Regional studies by land grant universities and other sources indicate land value increases of 2 to 3 percent in the first half of 1987 in the Corn Belt, but slight declines in much of the Southeast. Values in Florida appear to have turned around in the second quarter. Values of citrus and other bearing groves increased throughout the Southeast in both the first and second quarters.

The trend toward firmer farmland values reflects the improved farm income and financial situation. Estimates of net cash income have been revised upward as expenses have declined; farmers are paying off existing debts and are in a stronger position to purchase land. Demand for higher quality land is reported to be strong in all regions, and the market for poorer quality land has been strengthened by the CRP in areas where participation is high.

Credit for buying land is available, although interest rates have increased slightly. There appears to be a growing belief that the long decline in values may be at or near an end. However, continuing problems of surplus capacity, heavy dependence on Government farm programs, and the large

supply of land on the market will limit the strength of the rebound.

[Bill Heneberry (202) 786-1428]

### CROP ACREAGE CONTINUES DOWNWARD

Cropland used for crops—harvested, failed, and summer fallowed—is estimated to total 330 million acres in 1987, 27 million acres (8 percent) below last year. Acreage peaked at 387 million in 1981 following an increase to meet expanding export markets in the 1970's.

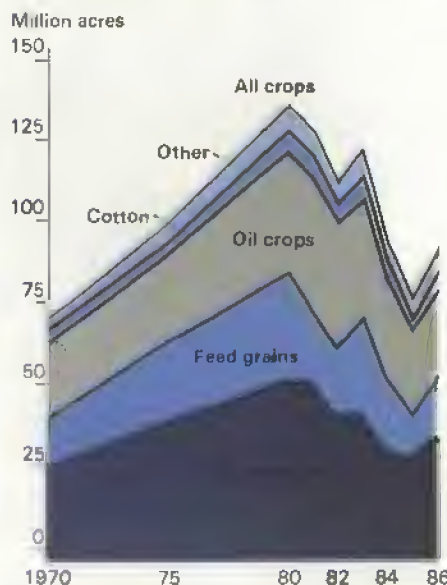
Crop acreage used for crops has been trending downward since 1981, as farmers have idled more land in farm programs. Producers likely idled nearly 68.5 million acres in 1987, 23.5 million more than in 1986. None were idled in farm programs in 1981.

When idled acreage is added to cropland used for crops, the combined acreage is relatively stable. It totaled about 398 million in 1987, nearly the same as in 1972 and in 1979. The acreage pattern is even more stable when the area in cropland pasture is included. Much, but not all, of the variation in cropland used for crops is explained by switching among cropping and pasture, and idling under Government programs.

### Fewer Crop Acres In All Regions in 1987

Acreage reductions in most regions this year are closely related to higher

### Crop Acreage for Export Begins to Recover



\* Acreage equivalents of U.S. crops exported.



# Cropland Used for Crops & Cropland Idled

Region	Change				
	1981	1986	1987 1/	1981-87	1986-87
Million acres					
<b>CROPLAND USED FOR CROPS</b>					
Northeast	13.6	12.8	12.3	-1.3	-0.5
Lake States	40.3	36.8	33.8	-6.5	-3.0
Corn Belt	87.5	81.3	74.0	-13.5	-7.3
No. Plains	93.5	91.1	86.5	-7.0	-4.6
Appalachia	19.4	17.4	16.5	-2.9	-0.9
Southeast	14.8	11.6	10.4	-4.4	-1.2
Delta States	19.6	16.1	15.6	-4.0	-0.5
So. Plains	38.0	32.1	27.2	-10.8	-4.9
Mountain	38.1	37.7	35.7	-2.4	-2.0
Pacific	22.2	19.9	18.1	-4.1	-1.8
United States 3/	387.0	356.8	330.1	-56.9	-26.7
<b>CROPLAND IDLED 2/</b>					
Northeast	0	0.4	0.8	0.8	0.4
Lake States	0	3.9	6.6	6.6	2.7
Corn Belt	0	8.2	14.8	14.8	6.6
No. Plains	0	13.5	19.0	19.0	5.5
Appalachia	0	1.2	2.4	2.4	1.2
Southeast	0	1.1	2.2	2.2	1.1
Delta States	0	2.2	3.1	3.1	0.9
So. Plains	0	6.9	9.8	9.8	2.9
Mountain	0	4.8	8.1	8.1	3.3
Pacific	0	1.8	3.2	3.2	1.4
United States 3/	0	45.0	68.5 4/	68.5	23.5

1/ Preliminary. 2/ Idled under Federal acreage reduction programs. 3/ Includes the 48 coterminous States. Because of rounding, regional data may not add to U.S. totals. 4/ Includes 15.8 million acres enrolled in the CRP. Another 7.1 million acres are enrolled in the 1988 CRP.

enrollment in 1987 commodity programs and in the Conservation Reserve Program, which is designed to idle highly erodible cropland for 10 years (see "CRP Halfway to Goal" in this issue).

The largest change from 1986 to 1987 in cropland used for crops was in the Corn Belt. In 1987, 7 million additional acres were cut from production. The preceding year, Corn Belt farmers idled about 6.6 million more acres in farm programs than in 1985.

Crop acreage in the Northern Plains is estimated to be down about 4.6 million from 1986. This reduction is less than the 5.5-million-acre cut in 1987; some nonparticipants apparently increased their crop acres.

## Three-Fourths of Area Idled in 1987 Is in Annual Programs

Farmers were encouraged to idle more acres in 1987 through higher set-aside requirements for wheat and feed grains, an option to idle an additional

15 percent of feed grain base in a diversion program, weaker market prices, unchanged target prices for most commodities, and the CRP. Also, some cropland is idled each year for various other physical and economic reasons.

The near-record acreage idled in 1987 is second only to the 78 million idled in 1983 with PIK and other programs. The amount idled in 1987 exceeds the amount idled in the Soil Bank peak; 65 million acres were idled in 1962.

About three-fourths (52.7 million) of the 1987 acreage idled is in annual acreage reduction programs, and the remaining 15.8 million acres were contracted in the CRP for 1986 and 1987. Idled acreage was higher in all regions in 1987, particularly in the Corn Belt and the Plains regions, which account for most of the feed grain and wheat production.

Even though crop yields continue to trend higher, acreage reduction programs reduced production of most program crops in 1986 and 1987. Cotton production in 1987, however, could be about a third higher than last year, as harvested area is up 18 percent and yields are up 16 percent. Also, wheat production is up slightly with higher yields on fewer acres.

Stocks as of September 1 remained large for most program commodities, although they are lower than expected. Even with greater enrollments in the CRP (7.1 million acres have already been accepted for the 1988 CRP) and continued high participation in annual programs in 1988, commodity stocks likely will remain big for feed grains and soybeans, unless U.S. disappearance expands further.

## Exports Up in 1987

Agricultural exports in fiscal 1987 are forecast at 129 million tons, 17 percent above 1986 volume. Lower U.S. loan rates, generic certificates, the Export Enhancement Program, and marketing loans have increased U.S. competitiveness in world markets. Higher demand for feed grains in several importing countries, together with reduced exportable supplies among major U.S. competitors, have further improved the U.S. position.

The area equivalent of forecast fiscal 1987 exports is estimated at 94 million acres, up nearly 20 percent from last year's 79 million acres. This expansion, however, is still substantially below the high of 137 million acre equivalents in 1980. Corn, wheat, and soybeans dominate U.S. agricultural exports.

Export acres in 1987 are expected to account for 29 percent of all acres harvested in calendar 1986, up from 23 percent a year earlier, but down from 39 percent in 1980.

## Crop Acreage Likely Lower in 1988

While U.S. agricultural exports are expanding and market prices are increasing for most crops, program participation will remain high in 1988. Although target prices for program commodities will be slightly lower in 1988, participation is expected to remain high, as producers rely on deficiency payments to supplement their returns. Additional enrollment in the CRP could reduce acreage in production area even more. [Roger Hexem (202) 786-1419]



## Controlling Farm Pollution of Coastal Waters

Agricultural pollution is a major problem in many of America's coastal waters. It takes three forms: 1) sedimentation, which arises from soil erosion and runoff from cropland, 2) nutrient enrichment, in which nitrogen and phosphorous from fertilizers are transported by runoff and groundwater into coastal areas, and 3) contamination from toxic chemicals such as herbicides and insecticides.

Agricultural production creates nonpoint-source pollution, in contrast to point sources such as municipal waste treatment plants and industrial sources. Nonpoint-source pollution has received increasing attention since passage of the Water Quality Act of 1987. Section 319 of the act requires States to develop programs to control nonpoint-source pollution, and authorizes an initial appropriation of \$400 million to do so.

### *Estuaries Become Pollutant Sinks*

Of all coastal waters, estuaries are of primary concern. An estuary is a semi-enclosed body of water where fresh water from rivers and streams mixes with marine salt water. For most types of water pollution, especially chronic conditions such as excessive nutrients and pesticide concentrations, estuaries and bays suffer the most significant impacts. Estuaries serve as "pollutant sinks," where pollutants persist in water and sediment and are not completely flushed by water currents. Out in the open ocean, wind and currents dissipate most pollutants.

Estuaries serve several diverse biological and ecological functions. They are nurseries for many important recreational and commercial fish stocks; at least two-thirds of the commercial fish stocks harvested in the United States depend on estuarine waters at some point in their life cycle. Estuaries provide habitat for a wide variety of

wildlife. Finally, estuaries provide swimming, fishing, hunting, and other recreational opportunities, often in close proximity to cities.

The physical consequences of the pollutants vary. While nutrients from farmland runoff can have some positive effect by contributing to the productivity of zooplankton and phytoplankton, excessive nutrients cause algae to bloom at abnormally high levels. This, in turn, depletes oxygen needed by other organisms. Large areas of Chesapeake Bay, for example, suffer low levels of dissolved oxygen during the summer. This can lead to declining fish harvests.

Silt deposits can damage spawning areas. Also, by increasing the turbidity of the waters, the deposits can block light needed by submerged aquatic vegetation, which is also an important component of spawning and nursery habitats.

Toxic deposits can kill fish and wildlife, and can indirectly harm organisms by contributing to diseases and increasing natural mortality rates. Pesticides cause a number of undesirable effects by passing through the food chain. Toxic compounds in lower order organisms and sediment can be concentrated as they are eaten by higher level fish and wildlife. High concentrations of pesticides have been found in some commercial fish and shellfish, and have harmed several waterfowl species.

Of course, agriculture is only one source of coastal water pollution. Others include urban runoff, municipal waste treatment plants, and industrial sources. ERS has recently begun to identify the scope and significance of agricultural contributions to coastal water pollution, and to measure the extent to which controlling this type of pollution could improve water quality in coastal regions.

Data as of 1982 were obtained on quantities of surface water pollutants (called "loadings") from both point and nonpoint sources in 23 coastal States. Seventy-eight estuarine systems were selected for further study.

Data on coastal land use, agricultural activity, and pollution loadings from point and nonpoint sources were examined by estuarine drainage area, that is, the upland area which drains into a given estuary. For the 78 estuarine systems considered, agricultural runoff supplied, on average, 24 percent of the total nutrient loadings and 40 percent of total sediment.

The data were further analyzed to identify those estuarine systems where agricultural sources account for major portions of total pollutant loadings. Estimates of pollutant loadings were used to assess the importance of agricultural nonpoint-source pollution in coastal water.

For example, while data on concentrations of pesticides in coastal waters are not available, coastal areas where per-acre losses of chemicals in runoff are relatively high are likely to have pesticide contamination problems in estuarine waters. Estuaries were identified according to three criteria: 1) those with above-average shares of total nutrient loadings supplied by agriculture sources, 2) those with drainage areas with high per-acre pesticide losses to surface water (defined as exceeding the average for all coastal States by 30 percent), and 3) those with both high agricultural nutrient inflows and high pesticide losses.



# Annual Cost and Effectiveness of Soil Conservation Practices

	Estimated annual cost per acre	Reduction in field losses				
		Soil	Nitrogen in surface runoff	Nitrate leached out of the root zone	Total nitrogen	Total phosphorus
	\$			Percent		
Permanent vegetative cover	150.00	95	90	-26 <sup>1</sup>	38	95
Contour tillage & shorter slope length	10.00	44	35	-3	18	37
Winter cover crop & residual management	0-20.00	14	11	6	9	8
Reduced tillage & residue mgmt. plus winter cover	10-20.00	30	50	-3	26	55
No-till & residue mgmt. plus winter cover	10-20.00	72	51	19	37	60
Sod waterway system	8.25	62	44	-3	23	49
Terrace system	66.25	70	50	-4	26	38
Diversion system w/20-foot sod filter strip	12.15	41	30	-2	16	39
Reduced tillage plus sod waterway	18.25	81	72	-5	38	76
Reduced tillage, along w/field contour, residue mgmt., sod water ways, terrace	94.50	90	69	-6	36	79
No-till planting along the field contour w/ residue mgmt.	20.00	84	68	15	44	75

<sup>1</sup>Minus sign before figure indicates increased nitrate contamination. Estimates are for continuously cropped land planted to corn, silt loam soil, 5-percent slope, daily spreading of manure at 20/tons/acre/year, Lancaster County, PA.

## Pollution of U.S. Coastal Waters by Agricultural Nonpoint Sources



Of the 78 estuaries, agriculture contributed more than one-fourth of total nutrient loadings in 22. High rates of pesticide losses to surface waters were found in 21 systems. Fifteen estuarine systems showed both significant agricultural nutrient loadings and high pesticide losses.

### **Soil Conservation Is Critical Factor**

One critical factor in identifying potential areas for non-point pollution control programs is the extent to which soil conservation practices are used to reduce erosion and runoff. Only 14 percent of all agricultural land in the estuarine systems examined had some form of conservation tillage or nutrient-management program in place in 1982.

While several important estuarine systems showed high levels of conservation practice (such as Chesapeake, Galveston, and San Francisco bays), the potential exists for further conservation to reduce erosion and nonpoint-source agricultural loadings in many coastal water systems.

The agricultural sector will likely be asked to help reduce further the pollution of coastal waters. Previous efforts have largely been targeted at controlling point sources. In many instances, further reductions in point-source loadings are becoming too costly, and more emphasis is being placed on controlling nonpoint sources, including agricultural runoff and soil erosion. The Water Quality Act requires State and Federal authorities to develop management plans that implement conservation practices to reduce nutrient, sediment, and pesticide pollution from cropland.

Many options are available to control agricultural nonpoint-source pollution, including structural measures (terracing or sod waterway systems) and nonstructural (conservation tillage and no-till practices, nutrient management, and pesticide management).

ERS recently completed a study of the cost effectiveness of several management options for soil conservation. Eleven different combinations of conservation strategies were analyzed for the per-acre cost and the expected reductions in soil erosion, nutrient loss to surface water, and nitrate loss to groundwater. The study area was a Rural Clean Water Project in Lancaster County, Pennsylvania.

### **Reduced Tillage, Residue Management Are Most Cost Effective**

In the study, permanent vegetative cover was the most effective means of controlling nonpoint-source pollution from cropland, but it also could be the most expensive. Thus, the unit cost of pollution reduction was higher than for other practices. Some of the more cost-effective management schemes were nonstructural.

However, Federal cost-sharing pays up to 75 percent of the costs of structural measures or 50 percent of the cost of permanent vegetative cover. This may encourage farmers to adopt structural approaches such as terraces and sod waterways rather than alternative tillage methods, for which financial assistance is not generally available.

Future public expenditures for control of nonpoint-source pollution could provide cost sharing for nonstructural solutions to achieve greater reductions in water pollution, and could be targeted at those areas where the potential for improvement in water quality is greatest. This would ensure the maximum effectiveness in reducing pollution while minimizing the burden on taxpayers and farmers.  
[Stephen Crutchfield (202) 786-1444]

## **AGRICULTURAL OUTLOOK**



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## "Quick PIK" Tax Ruling Revoked; Other Tax Problems Vex Farmers

On October 13, the Internal Revenue Service revoked a ruling from last February that had troubled many farmers who engage in "Quick PIK" transactions with generic commodity certificates. Simultaneously, the IRS announced a replacement ruling that is more in agreement with farmers' earlier expectations regarding the tax treatment of Quick PIK.

However, uncertain or unexpected tax treatment of payments under the Conservation Reserve (CRP) and Dairy Termination (DTP) programs still trouble some farmers. The tax implications of these new farm programs had not received widespread attention until after program enrollment and participation. Bills have been introduced in Congress to change or clarify the tax treatment of these program payments.

### *Generic Certificates*

USDA issues generic commodity certificates in lieu of cash payments to participants in farm programs. Over the last 2 years, many farmers have placed crops under loan to the CCC and immediately reacquired the loan collateral with generic certificates. This procedure is popularly known as "Quick PIK." It enables farmers to obtain price support and retain the ability to market or use their crops.

According to USDA regulations, a Quick PIK exchange is considered to be a sale of grain to the CCC and subsequent repurchase of the grain with generic certificates. Last February, the IRS indicated that its tax treatment of Quick PIK would be consistent with these regulations.

However, in the October ruling, IRS says that the USDA regulations do not reflect the substance of the transaction. The reversal is based on USDA assurances that, despite the regulations, USDA effectively permits farmers to pay off outstanding CCC loans through the use of generic certificates. Thus, the new ruling provides for taxation of a Quick PIK exchange as a loan redemption with generic certificates.

The February ruling was having a significant effect on those farmers who treat CCC loans as loans (rather than income) and routinely defer the sale of crops until the following year. Many of these farmers were facing much higher taxes because of the taxation of two crops in the same year. Some were avoiding higher taxes by delaying Quick PIK exchanges for this season's crops until 1988.

Under the new IRS ruling, these farmers are not taxed on Quick PIK grain until it is marketed. However, a Quick PIK exchange does result in a taxable gain equal to the difference between the loan amount and the cost of redemption.

Consider, for example, a farmer who receives a \$12,000 loan from CCC and immediately reacquires the loan collateral with generic certificates having a face value of \$10,000. As a result of this Quick PIK exchange, the farmer has a \$2,000 gain that is taxable this year. Since the reacquired grain is not taxed until it is sold, farmers can now engage in Quick PIK transactions this year and postpone the sale of grain until 1988 when tax rates will be lower.

### *Dairy Termination Program*

The DTP reduced milk production through cash payments to farmers who agreed to leave the dairy business for 5 years and sell all dairy cattle for slaughter or export. This program ended on August 31, 1987.

In spring 1986, following program enrollment, participants were asked to choose among alternative payment plans: receiving equal payments over 5 years, or receiving a large share of the total buyout payment in the first or second year.

Later in 1986, the Tax Reform Act resulted in some major changes in the tax consequences of the different payment options. Some participants realized that their chosen payment plans would result in far higher taxes than other plans they might have selected. USDA allowed participants to reschedule their payments, provided that they had not yet received the first one.

Earlier this year, Sen. Rudy Boschwitz (R., Minn.) asked the IRS whether these farmers would be taxed on buyout payments in the year of actual receipt, or the year in which the payments were originally scheduled to be received.

The IRS indicated that the answer would depend upon each farmer's individual circumstances, which implied that some farmers might be forced to accept the adverse tax consequences of their original payment plans. In response, Sen. Boschwitz introduced a bill that would provide for taxation of all dairy buyout payments in the year of receipt. His bill would also eliminate the recapture of investment tax credits on dairy facilities that are idled under the buyout program.

## Conservation Reserve

Under the Conservation Reserve Program, landowners receive annual payments from USDA for removing highly erodible land from crop production and establishing a permanent cover for 10 years. Some participants are uncertain whether CRP payments are subject to the 12.3-percent self-employment tax. Retired farmers also wonder if CRP payments can result in reductions in Social Security retirement benefits under the annual earning test (retirees aged 62-69 lose \$1 of benefits for each \$2 of wages and self-employment income above an exempt amount).

The following is an interpretation of the IRS position on CRP payments as outlined in correspondence with legislators earlier this year. In general, if a taxpayer is an active farmer, as evidenced by the filing of a Schedule F (Farm Income and Expenses), then CRP payments should be reported on the Schedule F, and are subject to the self-employment tax. If the taxpayer is not an active farmer (no Schedule F), then CRP payments are not subject to the tax.

The self-employment taxation of CRP payments will have an effect on bids for participation in the program. In general, active farmers will make fewer and higher bids as a result of the tax. The only potential participants who will disregard this tax are those with farm income and other wages that exceed the current \$43,800 limit on taxable earnings for Social Security. These farmers are already paying the maximum Social Security tax and are unaffected by the tax status of CRP payments.

The Social Security Administration (SSA) has indicated that CRP payments will not result in loss of retirement benefits under the annual earnings test, even when the payments are subject to the self-employment tax. However, farmers should inform SSA about these payments when applying for benefits, and each year thereafter, if they expect to earn self-employment income and wages that exceed the earnings test exempt amount.

In April, Rep. Tom Tauke (R., Iowa) introduced a bill that would exempt all CRP payments from self-employment taxation. Tauke argues that the IRS decision to tax these payments conflicts with Congressional intent. [Ron Jeremias and Ron Durst (202) 786-1889]

## RECENT PUBLICATIONS

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### PROGRAM HIGHLIGHTS

#### Tuesday, Dec. 1: Plenary

Opening, 10:30 a.m.-noon, Jefferson Auditorium. Secretary of Agriculture Lyng will deliver the keynote address. Noted economists will discuss 1988 prospects for the economy and U.S. and world agriculture.

1:30-5:00 p.m. Meeting Trade Challenges, Jefferson Auditorium. Five distinguished speakers will discuss the challenges in world trade faced by U.S. agriculture. What are prospects for farm export recovery? For trade legislation? For GATT negotiations to reduce trade barriers? What concerns do farmers and agribusiness have? Scheduled speakers include Farm Bureau President Dean Kleckner; Conagra President Mike Harper; Aart de Zeeuw, Chairman of GATT's Agriculture Committee; and noted consultant Carol Brookins.

Reception, 5:15-7:00 p.m., Administration Building Patio. This popular function will feature heavy hors d'oeuvres, a cash bar and music. An admission of \$6 will be collected at the door.

#### Wednesday, Dec. 2: Commodities

**Commodity Outlook.** On Wednesday the focus will shift to prospects for crops, livestock and forest products. During each session, USDA speakers will present the 1988 outlook in detail. Speakers from industry, universities and foreign organizations will offer their reactions and perspectives on the outlook. At commodity followup sessions, conferees will pose questions and exchange ideas with speakers in an informal setting.

7:30-5:00 Registration South Building, first floor, near Auditorium

Jefferson Auditorium  
South Building

8:30-9:30 4 **Feed Grain Outlook**  
Moderator: Gerald R. Rector, Grain Analyst, World Agricultural Outlook Board  
Feed Grain Outlook, Lawrence Van Meir, Economist, Economic Research Service  
Industry Reaction, Mike Laserson, Export Grain Department, Continental Grain Company  
Foreign Perspective, Daniel A. Miro, Chief Economist, Buenos Aires Grain Exchange

9:45-10:45 5 **Food Grain Outlook**  
Moderator: Gerald R. Rector, Grain Analyst, World Agricultural Outlook Board  
Food Grain Outlook, Frank Gomme, Marketing Specialist, Foreign Agricultural Service  
Industry Reaction, Adrian Tew, Vice President of Export and Chartering Division, Louis-Dryfus Company  
Foreign Perspective, Robert Bain, Director, Bureau of Agricultural Economics, Australia

11:00-12:15 6 **Generic Certificates**  
Moderator: Gerald R. Rector, Grain Analyst, World Agricultural Outlook Board  
Certificate Policy Issues and Outlook, William C. Bailey, Deputy Administrator, Agricultural Stabilization and Conservation Service  
Industry Reaction, Don Hilger, Senior Economist, Cargill Grain

Patio  
Administration Building

8:30-9:30 10 **Cotton Outlook**  
Moderator: Russell G. Barlowe, Fibers Analyst, World Agricultural Outlook Board  
Cotton Outlook, Robert A. Skinner, Agricultural Economist, Economic Research Service  
Where in the World is Cotton Headed? Trade Prospects to 1990, Lawrence H. Shaw, Executive Director, International Cotton Advisory Committee  
Industry Reaction, Dean Ethridge, Director of Economic Services, National Cotton Council

9:45-10:45 11 **Sweeteners Outlook**  
Moderator: John C. Roney, Specialty Crops Analyst, World Agricultural Outlook Board  
Sweeteners Outlook, Robert D. Barry, Head, Sweeteners Section, Economic Research Service  
World Perspective, Helmut Ahlfeld, Editor, F.O. Licht's International Sugar Report

11:00-12:30 12 **Nutrition: Linking Production with Nutritional Concerns**  
Moderator: Orville G. Bentley, Assistant Secretary for Science and Education, U.S. Department of Agriculture  
What Consumers Want, Jane Anderson, Executive Director, California Beef Council  
Product Technology, Barbara Luke, Staff Officer, National Academy of Sciences  
Industry Response, David H. Hurt, Director, Nutrition, Quaker Oats Company

Room 107  
Administration Building

8:30-9:30 16 **Fruit and Vegetable Outlook**  
Moderator: Winfred H. Crocker, Chief, Market News Branch, Fruit & Vegetable Division, Agricultural Marketing Service  
Fruit Outlook, Ben W. Huang, Agricultural Economist, Economic Research Service  
Vegetable Outlook, Shannon R. Hamm, Agricultural Economist, Economic Research Service  
The Impact of the Immigration Reform and Control Act, Allison T. French, Special Assistant for Labor Affairs, U.S. Department of Agriculture

9:45-10:45 17 **Fruit and Vegetable Followup**  
Moderator: Winfred H. Crocker, Chief, Market News Branch, Agricultural Marketing Service  
International Trade, Desmond O'Rourke, Director, The Impact Center, Washington State University  
Discussion

11:00-12:15 18 **Sweeteners Followup**  
Moderator: John C. Roney, Specialty Crops Analyst, World Agricultural Outlook Board  
Industry Reaction  
Thomas A. Hammer, President, Sweetener Users Association  
Eiler C. Ravnholt, Vice Chairman, U.S. Sweetener Producers Group  
Discussion

Room 3501  
South Building

8:30-9:30 22 **Forest Products**  
Moderator: Donald E. Nelson, National Program Leader, Extension Service  
Forest Products Outlook, Robert B. Phelps, Research Forester, Forest Service  
New Patterns of World Trade in Timber Products, Philip A. Araman, Forest Products Technologist, Forest Service

9:45-10:45 23 **Cotton Followup**  
Moderator: Russell G. Barlowe, Fibers Analyst, World Agricultural Outlook Board  
1988 Cotton Program, Charles V.



Cunningham, Leader, Fibers Group,  
Agricultural Stabilization and  
Conservation Service  
**Export Policies of Major Competitors,**  
Carolyn L. Whitton, Agricultural Economist,  
Economic Research Service  
**Survey of Cotton Trade Estimates,** John  
Reddington, Deputy Director for Analysis,  
Tobacco, Cotton and Seeds Division,  
Foreign Agricultural Service  
Discussion

- 11:00-12:15 24 Tobacco Outlook**  
Moderator: Lionel S. Edwards, Director,  
Tobacco Division, Agricultural Marketing  
Service  
**Domestic Tobacco Outlook,** Verner N.  
Grise, Agricultural Economist, Economic  
Research Service  
**World Outlook,** Daniel J. Stevens,  
Agricultural Economist, Foreign  
Agricultural Service  
**Industry Reaction,** James H. Starkey, Vice  
President, Universal Leaf Tobacco, Inc.

## WEDNESDAY AFTERNOON, DECEMBER 2

### Jefferson Auditorium South Building

- 1:15-2:15 7 Livestock Outlook**  
Moderator: James Nix, Livestock Analyst,  
World Agricultural Outlook Board  
**Cattle and Sheep Outlook**  
Ronald A. Gustafson, Agricultural  
Economist, Economic Research Service  
**Hog Outlook**  
Leland Southard, Agricultural Economist,  
Economic Research Service  
**Poultry Outlook**  
Jack Ross, Agricultural Economist,  
Agricultural Marketing Service  
**Industry Reaction**  
Robert Remmele, ConAgra, Inc.
- 2:30-3:00 8 Expanding U.S. Meat and Poultry Exports**  
Moderator: Norman R. Kallemeyn, Director,  
Dairy, Livestock Poultry Division, Foreign  
Agricultural Service  
**Meat Exports,** Bud Middaugh, U.S. Meat  
Export Federation (tentative)  
**Poultry Exports,** Elbert Boyd, E. Boyd  
Associates
- 3:00-3:30 Livestock Followup Discussion**
- 3:45-5:00 9 Dairy Outlook**  
Moderator: Charles Shaw, Group Leader,  
Dairy and Sweeteners, Agricultural  
Stabilization and Conservation Service  
**Dairy Outlook,** James J. Miller, Agricultural  
Economist, Economic Research Service  
**Dairy Programs,** Larry Hamm, Michigan  
State University  
**How the Dairy Industry Would Fare Under  
Freer Trade,** Milton Halberg, Pennsylvania  
State University

### Patio Administration Building

- 1:15-2:15 13 Grain Followup**  
Moderator: Gerald R. Rector Grain Analyst,  
World Agricultural Outlook Board  
**Long Term Outlook for Grain Demand,**  
Martin Abel, President, Abel, Daft and  
Early  
Discussion
- 2:30-3:30 14 Oilseeds Outlook**  
Moderator: Jim L. Matthews, Oilseeds  
Analyst, World Agricultural Outlook Board  
**Oilseeds Outlook** Roger Hoskin, Economic  
Research Service  
**Industry Reaction,** Dale Gustafson,  
Drexel Burnham-Lambert  
**Foreign Perspective,** Silmar Cesar Mueller,  
Editor, Safras e Mercado, Brazil
- 3:45-5:00 15 Oilseeds Followup**  
Moderator: Jim L. Matthews, Oilseeds  
Analyst, World Agricultural Outlook Board  
Discussion

### Room 107 Administration Building

- 1:15-2:15 19 Conservation**  
Moderator: Peter M. Tidd, Director, Appraisal  
and Program Development Division, Soil  
Conservation Service  
**Resource Conservation in a Changing  
World,** Paul Fuglestad, Agricultural  
Economist, Appraisal and Program  
Development Division, Soil Conservation  
Service  
**Role of RCA Report in Long-Term  
Planning,** Lawrence W. Libby, Professor  
and Chair, Food and Resource Economics  
Department, University of Florida
- 2:30-3:30 20 Transportation**  
**Double-Stacked Container Trains:  
Potential for Exports and Domestic  
Perishables**  
Moderator: Martin F. Fitzpatrick, Jr.,  
Administrator, Office of Transportation  
  
John Urban, Director, Special  
Commodities, American President Lines,  
Ltd.  
  
James W. Ronayne, Assistant Vice  
President, Global One, Chicago  
Northwestern Railroad
- 3:45-5:00 21 Rural Development**  
Moderator: To be announced  
**Rural Economic Conditions and  
Successful Development Strategies,**  
Kenneth L. Deavers, Director, Agriculture  
and Rural Economics Division, Economic  
Research Service  
**Developing Human Resources,** Stuart  
Rosenfeld, Director, Research  
and Programs, Southern Growth  
Policies Board

## Program Highlights, Continued

**Officials involved** in daily operation of the generic certificate program will take part in a special session on generic certificates. A highlight of the fruit and vegetable session will be discussion of farm labor under the Immigration Reform and Control Act.

**Trade Challenges.** A number of Wednesday speakers will discuss trade issues, including meat and poultry exports, implications of freer world dairy trade, potential of double-stacked container trains in promoting exports and trade prospects for fibers, fruit and vegetables and wood products.

**Rural Issues.** Rural economic trends, alternative rural development strategies and the "people" factor in development will be highlighted at Wednesday's rural development session. Results of the second appraisal of the recently passed Soil and Water Resources Conservation Act will be featured at the Wednesday afternoon conservation session.

**For Consumers.** Nutrition experts will discuss how

nutrition and health concerns are affecting choices in the marketplace. The family economics session will focus on consumer spending. A final session will feature the food price outlook and trends in international food service.

## Thursday Morning, Dec. 3: Finance and Trade

**Farm Finance.** On Thursday morning, forecasts of farm income and financial conditions will be followed by speakers on the Farm Credit System and a panel by discussion.

**Trade Forum.** There are many avenues to expanding farm exports. On Thursday morning, government officials will report on trade-enhancing initiatives. Industry speakers will describe successful campaigns to open new markets.

Thursday morning will culminate with a distinguished panel on future directions in farm policy and trade policy. Secretary Lyng will serve as moderator. Panelists will include leading members of Congress on farm and trade matters.

## CONFERENCE INFORMATION

### Conference Program

The preliminary conference program on the following pages is subject to change. A final program will be available at the conference.

### Security

Security in USDA buildings is strict. Federal Government employees must wear identification badges at all times. Other attendees should wear their conference name badge, which must be shown at building entrances.

### Registration

The conference is free and open to the public. To pre-register, complete and return the registration form at the end of this section.

**Note:** Federal employees in the Washington, D.C. area should not register. Your ID will serve as identification in USDA buildings.

When you arrive, enter at the central 4th-wing entrance of USDA's South Building, on Independence Avenue be-

tween 12th and 14th Streets. The conference registration desk will be to your right. In the front corridor at the fifth wing. Registration desk hours will be: Tuesday, 8:30 a.m.-5:00 p.m.; Wednesday, 7:30 a.m.-5:00 p.m.; Thursday, 8:00 a.m.-noon.

### Publications

Speech texts submitted by speakers before the conference will be reproduced and distributed to the conference.

A full proceedings of all statements submitted by speakers will be published in early 1988, and may be purchased using the form on the back of this brochure. A chartbook of graphs used by conference speakers, to be issued in December, also may be purchased.

### News Media

Media representatives are welcome; please pre-register if possible. On arrival, check in first at the registration desk. The press room will be located at room 4302 South Building, where staff will be available to assist you.

For further arrangements call Diane Decker, (202) 786-1494.

### Public Transportation

USDA is located at the Independence Avenue exit of the Smithsonian station on the orange and blue Metro (subway) lines. It is also at the end of the 50, V4 and V6 Metrobus lines.

### Dinners for Cotton, Sweeteners

Plans are being made to hold dinners Wednesday evening for those with an interest in cotton or sweeteners.

If interested in attending the cotton dinner, contact Edward Glade at (202) 786-1840; ERS, Room 1034, 1301 New York Avenue, N.W., Washington, D.C. 20005-4788. If interested in the sweeteners dinner, contact Frederick Gray at (202) 786-1769; ERS, Room 812, 1301 New York Avenue, N.W., Washington, D.C. 20005-4788.



## PRELIMINARY PROGRAM

**TUESDAY, DECEMBER 1**

8:30-5:00 Registration South Building, first floor, near Auditorium

### PLENARY Jefferson Auditorium South Building

- 10:30-10:35 Opening**  
Moderator: Ewen Wilson, Assistant Secretary for Economics
- 10:40-12:30 1 Keynote Address, Richard E. Lyng,**  
Secretary of Agriculture  
**Economic Outlook, Lawrence Chimerine,**  
Chairman and CEO, The WEFA Group Inc.  
**Agricultural Outlook, James R. Donald,**  
Chairperson, World Agricultural Outlook Board
- 1:30-4:00 2 Trade Challenges**  
Moderator: Alan Tracy, Special Assistant to the President for Agricultural Trade and Food Assistance

- 1:30-2:30 U.S. Agricultural Trade Outlook and Trade Issues. Speaker to be announced**  
**Trade Challenges: The International View,**  
Aart de Zeeuw, Chairman, GATT Committee on Agriculture
- 2:45-4:00 U.S. Farmers' Perspective, Dean Kleckner,**  
President, American Farm Bureau Federation  
**Agribusiness Perspective, Charles "Mike" Harper,**  
President, ConAgra, Inc.  
**Private Sector Perspective, Carol Brookins,**  
President, World Perspectives, Inc.
- 4:10-5:00 3 International Trade Challenges and U.S. Agriculture**  
Panel featuring speakers from Session 2
- 5:15-7:00 Reception, Patio, Administration Building**  
*Heavy hors d'oeuvres, Cash Bar, Music \$6.00*  
*Admission at door.*

## WEDNESDAY AND THURSDAY SCHEDULE AT A GLANCE

**Jefferson  
Auditorium,  
South  
Building**

**Patio,  
Administration  
Building**

**Room 107,  
Administration  
Building**

**Room 3501,  
South  
Building**

### WEDNESDAY, DECEMBER 2

8:30	4 Feed Grains	10 Cotton	16 Fruit/Vegetables	22 Forest Products
9:45	5 Food Grains	11 Sweeteners	17 Fruit/Veg. Followup	23 Cotton Followup
11:00	6 Generic Certificates	12 Nutrition (ends 12:30)	18 Sweeteners Followup	24 Tobacco
12:15	Lunch			
1:15	7 Livestock	13 Grain Followup	19 Conservation	25 Family Economics
2:30	8 Meat and Poultry Trade	14 Oilseeds	20 Transportation	Family Economics (Cont.)
3:45	9 Dairy	15 Oilseeds Followup	21 Rural Development	26 Food Prices/Marketing
5:00	Adjourn			

### THURSDAY, DECEMBER 3

**Jefferson Auditorium**

**Patio**

8:30	27 Meeting the Challenge: Adapting to World Markets	30 Farm Finance and Credit (8:30-9:35)
9:35	28 Meeting the Challenge: Farm Export Strategies	30 Farm Finance and Credit (Cont'd.) (9:45-10:30)
10:45	29 Meeting the Challenge: Distinguished Panel on Trade and Policy Directions	
12:00	Adjourn	

**Room 3501  
South Building**

- 1:15-2:15     25 Family Economics**  
Moderator: Waldemar Klassen, Director,  
Beltsville Area, Agricultural Research  
Service  
**Consumer Expenditure Survey:  
Methodological Issues for Today and  
Tomorrow**, Thesia Garner, Economist,  
Bureau of Labor Statistics  
Topic and speaker to be announced
- 2:30-3:30     25 Family Economics, continued**  
**Consumers' Reactions to Price Changes**,  
Jane Kolodinsky, Assistant Professor,  
University of Vermont  
**Consumer Spending and Saving: The 1988  
Family Economic Outlook**, Colien Hefferan,  
Research Leader, Family Economics  
Research Group, Agricultural Research  
Service
- 3:45-5:00     26 Food Prices and Marketing**  
Moderator: Bob H. Robinson, Associate  
Administrator, Economic Research Service  
**Food Price Prospects**, Ralph L. Parlett, Jr.,  
Agricultural Economist, Economic  
Research Service  
**Trends in International Food Service  
Marketing and Implications for U.S.  
Agriculture**, David S. Wexler, Vice  
President/Publishing Director, Cahner's  
Publishing Company

**THURSDAY MORNING, DECEMBER 3**

8:00-noon Registration, South Building, first floor,  
near Auditorium

Jefferson Auditorium  
South Building

- 10:45-12:00     29 Distinguished Panel on Trade and Policy  
Directions**  
Moderator: Richard E. Lyng, Secretary of  
Agriculture  
**Panel Members:**  
Senator Rudy Boschwitz, Minnesota  
Representative Thomas S. Foley,  
Washington  
Senator Patrick J. Leahy, Vermont  
Representative E. Kika de la Garza, Texas  
Other panelists to be announced

**Patio  
Administration Building**

- 8:30-9:25     30 Farm Finance and Credit Outlook**  
Moderator: Vance L. Clark, Administrator,  
Farmers Home Administration  
**Farm Finance Outlook**, Gary Lucier,  
Agricultural Economist, Economic  
Research Service  
**Farm Credit System**, Danny A. Kilnefelter,  
Extension Economist, Texas A&M  
University  
**Legislative Views on Current Issues**,  
Chuck Riemenschneider, Staff Director,  
Committee on Agriculture, Nutrition and  
Forestry, U.S. Senate
- 9:45-10:30     30 Farm Finance and Credit Outlook,  
continued  
Panel**  
Moderator: Emanuel Melichar, Senior  
Economist, Federal Reserve System  
**Panel Members:** Moderator and speakers  
from previous session  
**Questions and Answers**

**For Additional Information**

Call (202) 447-3050 or write Outlook '88,  
WAOB, Room 5143 South Building, USDA,  
Washington D.C. 20250-3800.

- 8:30-9:25     27 Meeting the Challenge: Adapting to World  
Markets**  
Moderator: Joan Wallace, Administrator,  
Office of International Cooperation and  
Development  
**Research and the Competitive Marketing  
Edge**, Terry B. Kinney, Administrator,  
Agricultural Research Service  
**The Trade Role of Food Trade Standards  
and Health Regulations**, Kenneth Gilles,  
Assistant Secretary for Marketing and  
Inspection Services
- 9:35-10:30     28 Meeting the Challenge: Farm Export  
Strategies**  
Moderator: Leo Mayer, Associate  
Administrator, Foreign Agricultural Service  
**Successful Strategies**, C.L. Otter, Corporate  
Vice President, J.R. Simplot Company;  
Lieutenant Governor of Idaho  
**International Marketing Programs**,  
Chairman, U.S. Agricultural Export  
Development Council (tentative)



# OUTLOOK CONFERENCE REGISTRATION

## Instructions

1. Registration is free.
2. Federal employees in the Washington, D.C. area should not register.
3. Outlook '88 badge or Federal ID will serve as identification during the conference.
4. To register, complete this form and return entire page to Outlook Conference, WAOB, Rm. 5143 South Bldg., USDA, Washington, D.C. 20250-3800.

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\_\_\_\_ I plan to attend the reception, 5:15-7:00 p.m., Tuesday, December 1.  
(Heavy hors d'oeuvres, \$6 admission at door, cash bar)

\_\_\_\_ I am enclosing a check or money order payable to USDA/WAOB for  
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## Outlook Publications

Proceedings of Outlook '88. Approx. 600 pages;  
early 1988 publication date. \$15.00 to U.S.  
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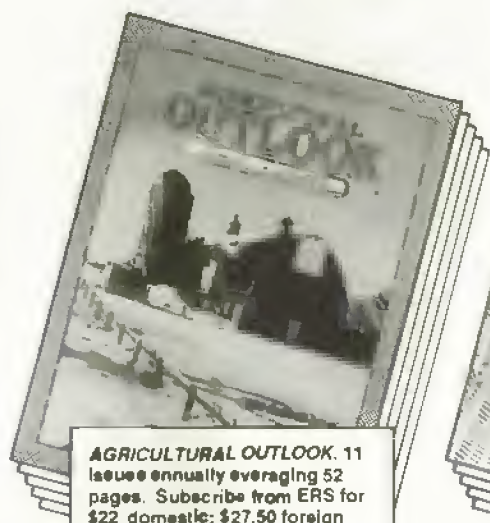
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per page; includes charts used by USDA speakers  
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# Statistical Indicators

## Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1986	1987					1988		
	Annual	I	II	III	IV F	Annual F	I F	II F	Annual F
Prices received by farmers (1977=100)	123	122	128	128	125	126	--	--	--
Livestock & products	138	143	148	150	146	147	139	--	137
Crops	106	100	107	105	106	104	--	--	--
Prices paid by farmers, (1977=100)									
Prod. items	146	143	147	149	147	147	151	80	149
Commodities & services, incl. taxes, & wages	159	159	162	164	163	162	166	80	166
Cash receipts (\$ bil) 1/	135	130	128	135	136	131-133	--	--	--
Livestock (\$ bil)	72	73	72	78	74	73-75	--	80	--
Crops (\$ bil)	64	57	56	59	64	58-60	--	--	--
Market basket (1967=100)									
Retail cost	289	299	303	300	298	300	--	--	--
Farm value	234	234	245	235	230	236	--	--	--
Spread	321	337	336	337	337	337	--	--	--
Farm value/retail cost (%)	30	29	30	30	30	30	--	--	--
Retail Prices (1967=100)									
Food	320	320	332	335	334	333	--	--	--
At home	305	316	319	319	317	318	--	--	--
Away-from home	360	370	372	378	381	375	--	--	--
Agricultural exports (\$ bil) 2/	26.3	6.9	6.5	6.9	7.9	28.0	7.0	6.5	28
Agricultural imports (\$ bil) 2/	20.8	5.5	5.3	4.6	4.8	20.5	5.0	4.8	--
Production: *									
Red meat (mil lb)	39,051	9,485	8,238	9,651	9,790	38,164	9,560	9,570	38,580
Poultry (mil lb)	17,929	4,533	4,933	5,170	5,030	19,666	4,865	5,300	20,675
Eggs (mil doz)	5,715	1,443	1,438	1,430	1,470	5,780	1,430	1,440	5,750
Milk (bil lb)	144.1	34.9	37.3	35.4	34.1	141.7	35.6	37.8	144.0
Consumption, per capita:									
Red meat and poultry (lbs)	214.3	52.4	52.9	54.5	56.0	215.9	53.8	55.3	221.9
Corn beginning stocks (mil bu) 3/	4,039.5	10,304.1	8,248.2	6,332.2	4,882.0	4,882.0	--	--	--
Corn use (mil bu) 3/	6,496.0	2,056.2	1,916.5	1,450.6	--	--	--	--	--
Prices: 4/									
Choice steers--Duma (\$/cwt)	57.75	60.46	68.60	65.20	62-66	64-65	61-67	64-70	62-68
Barrows and gilts--7 mths. (\$/cwt)	51.19	48.11	56.17	58.97	48-52	53-54	41-47	37-43	37-43
Broilers--12-city (cts/lb)	56.9	50.0	48.6	48.7	42-46	47-48	40-46	41-47	40-46
Eggs--NY Gr. A large (cts/doz)	71.1	64.8	58.9	63.5	63-67	63-64	60-66	57-63	60-66
Milk--all at plant (\$/cwt)	12.52	12.90	12.07	12.30	12.90-13.50	12.50-12.75	12.00-12.80	11.20-12.00	11.70-12.50
Wheat--Kansas city HRW (\$/bu)	2.93	2.80	2.94	2.65	--	--	--	--	--
Corn--Chicago (\$/bu)	2.35	1.56	1.82	1.70	--	--	--	--	--
Soybeans--Chicago (\$/bu)	5.11	4.87	5.37	5.17	--	--	--	--	--
Cotton--Avg. spot mkt. (cts/lb)	60.0	55.5	64.7	73.5	--	--	--	--	--
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F
Gross cash income (\$ bil)	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	152-154
Gross cash expenses (\$ bil)	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	96-98
Net cash income (\$ bil)	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	54-58
Net farm income (\$ bil)	27.4	16.1	26.8	23.5	12.7	32.0	32.3	37.5	42-46
Farm real estate values (1977=100) 5/	125	145	158	157	148	146	128	112	103

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 4/ Simple averages. 5/ As of February 1. F = forecast. \* = commercial production.

# U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1986			1987	
	1984	1985	1986	II	III	IV	I	II R
\$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,772.2	4,010.3	4,235.0	4,211.6	4,265.9	4,288.1	4,377.7	4,445.1
Personal consumption expenditures	2,430.5	2,629.4	2,799.8	2,765.8	2,837.1	2,858.6	2,893.8	2,943.7
Durable goods	335.5	368.7	402.4	386.4	427.6	419.8	396.1	409.0
Nondurable goods	867.3	913.1	939.4	934.3	840.0	946.3	969.9	982.1
Clothing & shoes	146.7	157.2	167.5	167.2	169.8	169.6	174.0	175.8
Food & beverages	448.5	472.8	497.8	494.7	499.6	507.5	514.8	515.0
Services	1,227.6	1,347.5	1,458.0	1,445.1	1,469.5	1,492.4	1,527.7	1,552.6
Gross private domestic investment	664.8	641.6	671.0	679.4	660.8	660.2	699.9	702.6
Fixed investment	597.1	631.6	655.2	651.9	657.3	666.6	648.2	662.3
Change in business inventories	67.7	10.0	15.7	27.5	3.5	-6.4	51.6	40.3
Net exports of goods & services	-58.9	-79.2	-105.5	-100.8	-110.5	-116.9	-112.2	-118.4
Government purchases of goods & services	735.9	818.6	869.7	867.2	878.5	886.3	896.2	917.1
1982 \$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,501.4	3,607.5	3,713.3	3,704.7	3,718.0	3,731.5	3,772.2	3,795.3
Personal consumption expenditures	2,249.3	2,352.6	2,450.5	2,434.3	2,477.5	2,480.5	2,475.9	2,487.5
Durable goods	323.1	352.7	383.5	369.6	405.5	399.0	375.9	385.4
Nondurable goods	825.9	849.5	877.2	880.0	879.8	880.3	883.2	879.0
Clothing & shoes	142.2	147.9	158.0	159.0	160.4	158.4	160.4	157.3
Food & beverages	422.8	436.5	444.9	447.3	442.2	444.0	447.5	441.6
Services	1,100.3	1,150.4	1,189.8	1,184.7	1,192.2	1,201.1	1,216.9	1,223.1
Gross private domestic investment	658.4	636.1	654.0	665.6	645.0	631.0	671.8	673.7
Fixed investment	596.1	628.7	640.2	637.6	638.8	645.4	624.2	634.7
Change in business inventories	62.3	7.4	13.8	28.1	6.1	-14.4	47.6	39.0
Net exports of goods & services	-84.0	-108.2	-145.8	-146.8	-161.6	-151.8	-135.2	-132.7
Government purchases of goods & services	677.7	726.9	754.5	751.6	757.2	771.8	759.6	766.7
GNP implicit price deflator								
% change	3.7	3.2	2.6	2.9	3.6	3.7	4.2	3.5
Disposable personal income (\$bil)	2,668.6	2,841.1	3,022.1	3,022.4	3,038.2	3,061.6	3,125.9	3,130.6
Disposable per. income (1982 \$bil)	2,469.8	2,542.2	2,645.1	2,660.2	2,653.2	2,656.7	2,674.6	2,645.5
Per capita disposable per. income (\$)	11,257	11,872	12,508	12,525	12,560	12,626	12,865	12,858
Per capita dis. per. income (1982 \$)	10,419	10,622	10,947	11,024	10,968	10,956	11,008	10,865
U.S. population, total, incl. military abroad (mil)	237.1	239.3	241.6	241.3	241.9	242.5	243.0	243.5
Civilian population (mil)	234.9	237.0	239.4	239.1	239.6	240.2	240.7	241.5
	Annual			1986			1987	
	1984	1985	1986	Aug	May	June	July	Aug P
Monthly data seasonally adjusted								
Industrial production (1977=100)	121.4	123.8	125.1	125.1	128.4	129.2	130.3	130.7
Leading economic indicators (1967=100)	165.3	168.6	179.3	180.3	188.9	190.8	191.4	192.6
Civilian employment (mil. persons)	105.0	107.2	109.6	110.1	112.4	112.3	112.7	113.1
Civilian unemployment rate (%)	7.5	7.2	7.0	6.6	6.3	6.0	5.8	5.9
Personal income (\$ bil annual rate)	3,108.7	3,327.0	3,534.3	3,552.9	3,708.5	3,715.3	3,732.3	3,749.8
Money stock-M2 (daily avg) (\$bil) 1/	2,373.7	2,566.5	2,799.8	2,719.7	2,840.7	2,842.3	2,848.4	2,862.7
Three-month Treasury bill rate (%)	9.58	7.48	5.98	5.57	5.75	5.69	5.78	6.00
4-1/2 corporate bond yield (Moody's) (%)	12.71	11.37	9.02	8.72	9.33	9.32	9.42	9.67
Housing starts (thou) 2/	1,750	1,742	1,805	1,800	1,606	1,586	1,606	1,582
Auto sales at retail, total (mil)	10.4	11.0	11.4	12.5	9.6	10.0	10.5	12.4
Business inventory/sales ratio	1.48	1.50	1.54	1.55	1.50	1.49	1.50	--
Sales of all retail stores (\$ bil)	107.5	115.0	121.2	121.8	124.9	126.3	127.0 P	128.6
Nondurable goods stores (\$ bil)	68.5	71.8	73.8	73.9	77.1	77.3	77.6 P	78.1
Food stores (\$ bil)	22.6	23.7	24.6	24.4	25.3	25.4	25.4 P	25.7
Eating & drinking places (\$ bil)	10.4	11.1	12.1	12.3	12.7	12.8	12.8 P	12.9
Apparel & accessory stores (\$ bil)	5.6	6.2	6.7	6.9	7.0	7.1	7.2 P	7.2

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. R = revised.

Information contact: James Malley (202) 786-1283.



Table 3.—Foreign Economic Growth, Inflation, &amp; Export Earnings

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986 P	1987 F
Annual Percent Change										
Total foreign										
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.7	2.5
CPI	10.2	14.0	16.7	15.8	14.4	18.7	21.3	21.0	11.7	25.5
Export earnings	27.5	14.6	22.6	-2.2	-6.8	-2.5	5.6	1.8	12.9	13.3
Developed less U.S.										
Real GNP	4.8	3.1	2.3	1.3	1.1	1.9	3.4	3.3	2.4	2.2
CPI	8.4	9.4	10.9	9.6	8.1	6.1	5.1	4.7	2.9	2.6
Export earnings	23.9	14.9	17.0	-3.3	-4.2	-0.5	6.6	4.9	20.6	13.6
Centrally planned										
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.9	3.9	3.6
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	1.8	6.7
Latin America										
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.3	3.6	3.7	1.4
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.3	179.2	90.9	241.1
Export earnings	28.1	12.8	30.1	4.8	-9.7	-0.1	7.7	-6.1	-14.7	9.3
Africa & Middle East										
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	1.1	0.1	-1.2	0.1
CPI	8.7	16.4	22.1	19.7	12.0	19.0	5.9	5.3	8.2	8.6
Export earnings	49.6	43.2	38.5	-7.0	-18.9	-17.2	-8.4	-9.3	-25.7	11.4
ASIA										
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	5.5
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.4	4.9	5.6
Export earnings	30.1	19.4	27.3	5.0	-0.6	3.5	13.3	-1.4	6.8	19.8

P = preliminary. F = forecast. Information contact: Timothy Baxter (202) 786-1688.

## Farm Prices

Table 4.—Indexes of Prices Received &amp; Paid by Farmers, U.S. Average

	Annual			1986	1987					
	1984	1985	1986	Sept	Apr	May	June	July	Aug R	Sept P
1977=100										
Prices received										
All farm products	142	128	123	122	125	129	131	128	127	129
All crops	139	120	106	97	102	109	111	106	103	106
Food grains	144	133	109	91	103	105	97	92	84	100
Feed grains & hay	145	122	98	77	84	92	80	86	82	84
Feed grains	148	122	96	73	79	85	87	82	78	78
Cotton	108	93	91	79	87	107	118	118	108	108
Tobacco	153	153	138	136	130	130	130	127	127	136
Oil-bearing crops	109	84	77	75	74	78	80	79	80	79
Fruit, all	202	181	167	173	166	170	199	167	176	181
Fresh market 1/	220	192	175	182	173	178	212	177	188	193
Commercial vegetables	135	127	129	131	141	137	128	134	127	145
Fresh market	133	122	123	126	139	132	120	132	123	146
Potatoes & dry beans	157	124	114	109	143	174	173	162	124	106
Livestock & products	146	136	138	146	147	148	150	149	151	151
Meat animals	151	142	145	155	165	169	173	170	171	171
Dairy products	139	131	129	132	127	124	123	124	127	130
Poultry & eggs	135	119	128	136	112	107	104	105	110	112
Prices paid										
Commodities & services										
Interest, taxes, & wage rates	165	163	159	--	162	--	--	164	--	--
Production items	155	151	145	--	147	--	--	149	--	--
Feed	135	116	108	--	101	--	--	105	--	--
Feeder livestock	154	154	153	--	179	--	--	182	--	--
Seed	151	153	148	--	149	--	--	149	--	--
Fertilizer	143	135	124	--	117	--	--	117	--	--
Agricultural chemicals	128	128	127	--	123	--	--	123	--	--
Fuels & energy	201	201	162	--	164	--	--	170	--	--
Farm & motor supplies	147	146	144	--	145	--	--	145	--	--
Autos & trucks	182	193	198	--	210	--	--	212	--	--
Tractors & self-propelled machinery	181	178	174	--	174	--	--	174	--	--
Other machinery	180	183	184	--	186	--	--	186	--	--
Building & fencing	138	136	136	--	136	--	--	136	--	--
Farm services & cash rent	152	150	150	--	148	--	--	148	--	--
Interest payable per acre on farm real estate debt	257	238	213	--	207	--	--	207	--	--
Taxes payable per acre on farm real estate	132	133	134	--	136	--	--	136	--	--
Wage rates (seasonally adjusted)	151	154	160	--	171	--	--	171	--	--
Production items, interest, taxes, & wage rates	162	157	151	--	153	--	--	154	--	--
Ratio, prices received to prices paid 2/	86	79	77	77	77	80	81	78	77	79
Prices received (1910-14=100)	650	585	560	558	573	589	597	583	582	590
Prices paid, etc. (Parity index) (1910-14=100)	1,132	1,120	1,097	--	1,116	--	--	1,127	--	--
Parity ratio (1910-14=100) 2/	57	52	51	--	51	--	--	52	--	--

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data will be published in January, April, July, and October. P = preliminary. R = revised.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual <sup>a</sup>			1986	1987					
	1984	1985	1986	Sept	Apr	May	June	July	Aug R	Sept P
<b>Crops</b>										
All wheat (\$/bu)	3.46	3.20	2.71	2.28	2.62	2.66	2.45	2.31	2.36	2.52
Rice, rough (\$/cwt)	8.32	7.85	5.04	3.82	3.64	3.74	3.68	3.65	3.74	3.73
Corn (\$/bu)	3.05	2.49	1.96	1.45	1.52	1.66	1.69	1.60	1.47	1.52
Sorghum (\$/cwt)	4.60	3.97	3.11	2.36	2.58	2.69	2.80	2.68	2.52	2.51
All hay, baled (\$/ton)	75.38	69.93	61.80	57.80	62.90	73.30	63.20	61.60	61.80	65.10
Soybeans (\$/bu)	7.02	5.42	5.00	4.85	4.90	5.20	5.36	5.25	5.02	5.00
Cotton, Upland (cts/lb)	65.6	56.1	54.7	47.5	52.6	64.8	71.5	71.7	65.3	65.3
Potatoes (\$/cwt)	5.69	3.92	4.94	4.28	5.81	7.45	7.43	6.89	5.10	4.27
Lettuce (\$/cwt)	11.00	10.90	11.90	12.60	9.22	8.54	8.71	16.90	18.00	20.00
Tomatoes (\$/cwt)	25.60	24.10	25.10	20.70	26.90	28.30	26.00	20.80	16.50	22.90
Onions (\$/cwt)	11.70	9.97	9.80	10.90	26.30	23.10	17.00	14.30	9.79	10.30
Dry edible beans (\$/cwt)	18.70	17.60	19.00	15.40	17.80	18.00	17.60	17.60	16.10	15.30
Apples for fresh use (cts/lb)	15.5	17.3	NA	22.3	19.4	21.4	25.7	25.3	15.5	18.0
Pears for fresh use (\$/ton)	300.00	349.00	393.00	313.00	355.00	338.00	630.00	295.00	234.00	239.00
Oranges, all uses (\$/box) 1/	5.95	7.41	4.18	5.57	4.94	5.26	6.22	4.58	6.18	6.01
Grapefruit, all uses (\$/box) 1/	2.68	4.01	4.21	8.22	5.21	4.41	5.08	4.50	5.95	5.52
<b>Livestock</b>										
Beef cattle (\$/cwt)	57.56	53.96	52.84	54.60	62.60	63.00	62.50	61.10	61.90	63.60
Calves (\$/cwt)	60.23	62.40	60.89	63.40	75.10	77.30	78.80	80.30	82.30	86.00
Hogs (\$/cwt)	47.61	43.88	50.10	58.30	50.80	54.40	60.30	59.60	58.60	53.60
Lambs (\$/cwt)	60.33	68.07	69.10	67.60	86.10	90.10	83.50	78.70	76.10	75.40
All milk, sold to plants (\$/cwt)	13.46	12.75	12.50	12.80	12.30	12.00	11.90	12.00	12.30	12.60
Milk, manuf. grade (\$/cwt)	12.49	11.72	11.46	11.80	11.20	11.00	10.90	10.90	11.20	11.50
Broilers (cts/lb)	33.7	30.1	34.5	36.5	29.6	30.0	27.6	28.1	31.6	28.5
Eggs (cts/doz) 2/	70.3	57.4	60.3	62.9	55.6	50.1	50.9	51.4	50.6	59.7
Turkeys (cts/lb)	46.6	47.2	44.4	51.4	36.5	35.0	34.5	33.1	31.4	30.8
Wool (cts/lb) 3/	79.5	63.3	66.8	57.6	96.8	111.0	94.9	86.6	84.2	88.2

1/ Equivalent on-tree returns. 2/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 3/ Average local market price, excluding incentive payments. \*Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. P = preliminary. R = revised. NA = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1986	1987 1/							
	1986	Aug	Jan	Feb	Mar	Apr	May	June	July	Aug
						1967=100				
Consumer price index, all items	328.4	328.6	333.1	334.4	335.9	337.7	338.7	340.1	340.8	342.7
Consumer price index, less food	328.6	328.1	332.2	333.6	335.4	337.3	338.3	339.6	340.5	342.7
All food	319.7	322.7	328.9	330.1	330.0	331.0	332.5	334.1	333.6	333.8
Food away from home	360.1	361.8	368.6	369.6	370.9	371.5	372.3	373.8	374.9	375.9
Food at home	305.3	308.9	315.2	316.6	315.8	316.9	318.8	320.4	319.1	319.0
Meats 2/	273.9	279.8	288.6	285.3	286.4	286.9	291.8	297.1	299.8	301.0
Beef & veal	271.4	270.9	282.9	280.7	282.7	285.8	292.6	297.6	297.7	296.2
Pork	273.8	282.6	294.0	289.8	287.2	284.4	289.4	297.7	305.8	308.3
Poultry	232.7	255.0	238.4	237.0	234.1	231.1	230.5	228.3	226.1	230.0
Fish	443.2	446.3	478.0	479.9	487.4	488.7	486.6	484.2	489.7	493.7
Eggs	186.3	192.9	193.2	187.4	180.0	174.6	169.5	161.2	168.2	164.4
Dairy products 3/	258.4	258.3	263.3	264.7	263.7	263.2	264.3	263.7	263.2	264.2
Fats & oils 4/	287.8	287.8	293.2	290.3	294.6	291.8	293.3	291.4	292.9	292.6
Fresh fruit	369.3	391.5	389.1	406.7	403.9	417.8	431.8	437.5	416.7	410.2
Processed fruit 5/	163.3	162.3	165.7	166.3	167.5	168.4	170.5	171.0	170.2	171.8
Fresh vegetables	330.3	321.9	356.3	377.7	364.7	379.4	379.0	396.3	371.0	351.3
Potatoes	307.3	357.9	340.1	357.0	355.3	371.4	406.1	436.1	444.6	407.7
Processed vegetables 5/	147.4	148.5	150.2	148.5	152.1	150.6	151.2	151.9	152.3	152.7
Cereals & bakery products 5/	325.8	328.2	331.5	332.7	333.2	335.6	336.5	337.0	338.4	338.8
Sugar & sweets	411.1	413.1	415.8	415.8	417.2	417.4	417.7	419.3	418.8	419.6
Beverages, nonalcoholic	478.2	476.9	482.6	481.9	475.4	469.8	467.9	462.6	458.5	458.8
Apparel Commodities less footwear	188.8	188.1	187.7	189.0	196.1	199.8	198.5	194.7	190.7	195.3
Footwear	211.2	209.6	209.9	211.0	216.5	219.2	220.8	218.8	214.3	215.9
Tobacco & smoking products	351.0	356.2	364.9	368.3	369.6	370.4	370.9	372.7	379.9	380.8
Beverages, alcoholic	239.7	240.1	242.5	243.2	243.6	244.3	245.0	245.9	246.7	247.3

1/ Beginning January 1987 the CPIs are calculated using 1982-84 expenditure patterns and updated population weights. The old series were based on 1972-73 expenditure patterns. 2/ Beef, veal, lamb, pork, and processed meat. 3/ Includes butter. 4/ Excludes butter. 5/ December 1977=100.

Information contact: Ralph Parlett (202) 786-1870.



Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1986	1987					
	1984	1985	1986 P	Aug	Mar	Apr R	May	June	July	Aug
					1967=100					
Finished goods 1/	291.1	293.7	289.7	288.4	292.6	294.9	296.3	296.8	297.8	297.2
Consumer foods	273.3	271.2	278.1	284.0	280.3	283.2	286.7	287.7	287.6	283.6
Fresh fruit	253.0	256.1	262.1	274.5	268.0	252.5	251.1	260.3	256.1	247.8
Fresh & dried vegetables	278.3	245.1	241.1	237.8	260.0	258.5	252.2	284.9	282.2	232.4
Dried fruit	386.6	363.5	377.4	381.5	385.6	385.3	384.9	383.6	390.6	390.5
Canned fruit & juice	312.4	323.1	315.1	317.4	323.9	321.0	324.5	331.1	330.2	328.0
Frozen fruit & juice	351.0	362.3	314.8	311.2	336.7	341.0	341.7	343.1	343.2	340.7
Fresh veg. excl. potatoes	219.1	205.9	204.0	184.8	213.2	209.8	193.8	214.0	209.2	158.2
Canned veg. and juices	252.6	246.9	245.1	244.3	253.8	253.3	251.3	257.5	247.5	249.1
Frozen vegetables	291.0	298.4	298.5	298.5	300.9	301.7	302.3	296.9	300.4	300.1
Potatoes	397.7	304.3	312.6	367.1	362.1	366.1	413.1	397.4	398.8	367.2
Eggs	210.8	171.0	177.9	191.4	160.3	161.0	150.9	143.2	152.4	142.4
Bakery products	299.1	313.7	321.3	322.9	321.9	322.4	323.2	324.8	326.4	327.6
Meats	236.8	227.9	235.2	252.8	234.8	250.5	265.0	269.1	269.3	257.4
Beef & veal	237.1	221.3	216.0	220.9	224.2	239.6	251.4	248.7	246.2	233.5
Pork	226.5	223.8	250.9	296.2	228.2	253.5	279.3	295.5	298.1	281.5
Processed poultry	206.0	197.3	207.8	345.8	190.6	190.5	192.9	183.3	181.4	185.6
Fish	476.0	484.2	530.4	522.7	591.5	569.5	640.0	602.9	599.7	578.3
Dairy products	251.7	249.4	248.8	249.6	252.3	252.0	250.7	251.0	252.4	253.8
Processed fruits & vegetables	294.3	296.3	287.9	288.5	297.4	297.3	297.5	300.1	297.0	296.8
Shortening & cooking oils	311.6	290.6	242.4	235.5	238.6	238.5	244.8	242.7	243.7	240.9
Consumer finished goods less foods	294.1	297.3	283.5	277.5	286.3	288.6	289.6	290.1	292.0	292.9
Beverages, alcoholic	209.8	213.0	217.8	218.8	219.3	220.5	219.5	220.2	217.7	219.1
Soft drinks	340.2	343.6	349.7	347.6	355.2	356.6	356.7	356.5	355.3	357.1
Apparel	201.3	204.1	206.5	206.5	209.1	209.5	209.0	210.1	211.0	211.6
Footwear	251.7	256.7	261.8	261.6	265.5	265.1	266.5	263.4	268.5	270.3
Tobacco products	398.4	428.1	460.4	469.2	487.4	487.4	487.5	487.5	509.3	509.2
Intermediate materials 2/	320.0	318.7	307.6	304.5	309.3	311.0	312.7	314.8	317.1	318.2
Materials for food manufacturing	271.1	258.8	251.0	255.5	250.4	255.3	261.5	261.2	262.0	258.5
Flour	185.2	183.0	173.4	165.4	169.4	170.4	177.4	168.9	167.2	166.9
Refined sugar 3/	173.5	165.6	166.4	166.6	169.3	171.5	170.8	171.9	172.7	172.1
Crude vegetable oils	262.2	219.6	135.8	123.0	130.7	128.6	144.6	134.1	131.5	126.8
Crude materials 4/	330.8	306.1	280.3	276.3	288.6	295.3	304.7	304.9	307.8	307.7
Foodstuffs & feedstuffs	259.5	235.0	231.0	238.1	229.6	240.1	251.3	246.5	243.1	240.1
Fruits & vegetables 5/	278.1	260.5	261.2	265.0	274.8	258.5	262.4	285.5	282.0	232.4
Grains	239.7	202.8	167.2	138.9	142.3	149.8	166.6	156.0	145.0	133.6
Livestock	251.8	229.9	236.1	253.0	247.6	269.0	280.5	280.9	274.4	273.1
Poultry, live	240.6	226.2	248.8	340.0	199.5	202.0	216.4	180.7	196.3	213.4
Fibers, plant & animal	228.4	197.8	179.3	94.3	182.4	199.6	220.6	235.7	243.7	250.5
Fluid milk	278.3	264.6	256.9	256.2	260.5	256.1	252.5	249.0	253.5	257.3
Oilseeds	253.3	202.7	196.2	187.7	199.9	206.8	223.5	226.6	221.0	213.0
Tobacco, leaf	274.6	274.1	243.0	225.5	230.8	229.1	229.1	229.1	229.1	223.8
Sugar, raw cane	312.0	291.3	292.2	292.9	305.8	307.0	308.1	309.0	310.8	309.5
All commodities	310.3	308.7	299.8	297.2	302.7	305.0	307.3	308.5	310.2	310.5
Industrial commodities	322.6	323.8	312.1	307.9	315.7	317.3	318.6	320.2	322.6	323.8
All foods 6/	269.2	264.5	268.4	273.9	270.2	273.2	277.7	278.5	278.5	273.8
Farm products & feeds	262.4	250.5	252.0	255.5	252.0	257.1	263.6	263.0	261.8	258.6
Farm products	255.8	230.5	224.7	227.0	223.3	231.9	241.1	239.1	236.3	231.1
Processed foods & feeds 6/	265.0	260.4	265.1	269.6	266.2	269.5	274.7	274.8	274.4	272.1
Cereal & bakery products	270.5	279.9	281.8	281.4	282.2	282.7	284.2	283.4	283.7	284.7
Sugar & confectionery	301.2	291.0	295.7	296.0	299.8	301.7	301.2	304.5	307.4	307.3
Beverages	273.1	276.6	294.3	292.9	290.1	291.1	290.3	290.4	288.1	289.2

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. (Dec. 1977=100). 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). (1977=100). R = revised. P = preliminary.

Information contact: Bureau of Labor Statistics (202) 523-1913.

# Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual				1986	1987					
	1983	1984	1985	1986	Aug	Mar	Apr	May	June	July	Aug
<b>Market basket 1/</b>											
Retail cost (1967=100)	268.7	279.3	282.6	288.7	292.8	298.8	299.8	302.7	305.7	305.2	305.0
Farm value (1967=100)	242.3	255.4	237.2	234.1	247.3	236.5	240.1	246.8	249.4	247.4	242.7
Farm-retail spread (1967=100)	284.3	293.3	309.3	320.8	319.7	335.5	334.9	335.5	338.8	338.1	341.7
Farm value/retail cost (%)	33.4	33.8	31.1	30.0	31.3	29.3	28.7	30.2	30.2	30.0	29.4
<b>Meat Products</b>											
Retail cost (1967=100)	267.2	268.1	265.5	273.8	279.8	286.1	285.5	291.5	297.7	298.8	301.0
Farm value (1967=100)	235.8	241.5	221.8	229.1	249.0	232.4	245.2	260.5	270.1	269.2	257.6
Farm-retail spread (1967=100)	304.0	299.1	316.6	326.2	315.8	349.0	332.6	327.8	330.1	336.3	351.8
Farm value/retail cost (%)	47.6	48.6	45.1	45.1	48.0	43.8	46.3	48.2	48.9	48.3	46.2
<b>Dairy Products</b>											
Retail cost (1967=100)	250.0	253.2	258.0	258.4	258.3	263.2	263.0	263.7	263.2	263.2	264.2
Farm value (1967=100)	262.1	258.8	248.2	241.5	239.7	245.5	241.8	238.0	237.1	238.8	241.7
Farm-retail spread (1967=100)	239.3	248.3	266.5	273.3	274.6	278.7	281.8	286.3	286.1	284.6	284.0
Farm value/retail cost (%)	49.0	47.8	45.0	43.7	43.4	43.6	43.0	42.2	42.1	42.4	42.8
<b>Poultry</b>											
Retail cost (1967=100)	197.5	218.5	216.4	232.7	255.0	234.1	230.7	230.4	228.6	226.1	230.0
Farm value (1967=100)	213.0	249.9	234.9	255.4	326.4	214.6	215.8	216.0	201.9	202.6	219.8
Farm-retail spread (1967=100)	182.4	188.1	198.4	210.9	185.9	253.0	245.2	244.3	254.4	248.8	239.9
Farm value/retail cost (%)	53.1	56.3	53.4	54.0	63.0	45.1	46.0	46.1	43.4	44.1	47.0
<b>Eggs</b>											
Retail cost (1967=100)	187.1	209.0	174.3	186.3	192.9	180.3	175.0	169.9	161.5	168.2	164.4
Farm value (1967=100)	206.1	230.3	178.9	192.7	199.0	164.8	166.7	143.7	147.5	149.9	146.3
Farm-retail spread (1967=100)	159.6	178.2	167.6	177.1	184.1	202.6	187.0	207.8	181.7	194.6	190.3
Farm value/retail cost (%)	65.1	65.1	60.7	61.1	61.0	54.0	56.3	50.0	54.0	52.7	52.6
<b>Cereal &amp; Bakery Products</b>											
Retail cost (1967=100)	292.9	305.3	317.0	325.8	328.2	332.9	335.0	335.6	336.3	338.4	338.8
Farm value (1967=100)	186.6	192.0	175.9	142.3	123.9	131.5	131.0	133.8	128.0	123.3	123.6
Farm-retail spread (1967=100)	314.0	328.7	346.2	363.7	370.5	374.6	377.2	377.2	379.4	382.9	383.3
Farm value/retail cost (%)	11.1	10.8	9.5	7.5	6.5	6.8	6.7	6.8	6.5	6.2	6.3
<b>Fresh Fruits</b>											
Retail cost (1967=100)	303.6	345.3	383.5	390.1	418.2	429.2	442.1	464.4	476.2	459.9	452.0
Farm value (1967=100)	220.6	315.1	302.7	285.3	290.9	282.5	257.3	297.8	312.1	289.5	242.4
Farm-retail spread (1967=100)	340.8	358.9	419.8	437.1	475.3	495.1	525.1	539.2	549.8	536.4	546.1
Farm value/retail cost (%)	22.5	28.3	24.4	22.7	21.5	20.4	18.0	19.9	20.3	19.5	16.6
<b>Fresh Vegetables</b>											
Retail cost (1967=100)	299.3	331.8	317.5	330.3	321.9	363.6	378.0	376.0	395.4	371.0	351.3
Farm value (1967=100)	267.4	298.7	256.7	248.1	263.8	298.8	301.5	293.4	314.7	318.0	317.6
Farm-retail spread (1967=100)	314.3	347.4	346.1	369.0	348.2	394.1	414.0	414.0	433.3	395.9	367.1
Farm value/retail cost (%)	28.6	28.8	25.9	24.0	26.2	26.3	25.5	25.0	25.4	27.4	28.9
<b>Processed Fruits &amp; Vegetables</b>											
Retail cost (1967=100)	288.8	306.1	314.1	309.1	309.2	317.9	317.0	319.0	320.2	321.0	323.0
Farm value (1967=100)	300.5	343.5	378.5	326.3	317.5	369.5	365.6	364.7	368.4	338.1	335.9
Farm-retail spread (1967=100)	286.2	297.8	299.9	305.3	307.4	306.5	306.5	308.9	313.3	317.2	320.1
Farm value/retail cost (%)	18.9	20.3	21.8	19.1	18.6	21.1	20.8	20.7	19.8	19.1	18.8
<b>Fats &amp; Oils</b>											
Retail cost (1967=100)	263.1	288.0	294.4	287.8	287.8	293.9	291.4	292.8	291.8	292.9	292.6
Farm value (1967=100)	251.0	324.8	271.3	198.1	187.0	192.5	188.1	198.3	188.5	189.7	188.0
Farm-retail spread (1967=100)	267.8	273.8	303.3	321.9	326.6	332.9	331.3	329.1	331.6	332.6	332.9
Farm value/retail cost (%)	26.5	31.3	25.6	18.4	18.1	18.2	17.9	18.8	17.9	18.0	17.8

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts: beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices, and Expenditures, Statistical Bulletin 749, ERS, USDA.

Information contacts: Denise Dunham (202) 786-1870; Ron Gustafson (202) 786-1830.



Table 9.—Price Indexes of Food Marketing Costs

(See the Sept. Issue)

Information contact: Denis Dunham (202) 786-1870

## Livestock and Products

Table 10.—U.S. Meat Supply &amp; Use

Item <sup>1</sup>	Beg. stocks	Pro- duc- tion 1/	Im- ports	Total supply	Ex- ports	Ship- ments	Mili- tary con- sump- tion	Ending stocks	Civilian consumption		Primary market price 3/
									Total	Per capita 2/	
										Pounds	
Million pounds 4/											
Beef:											
1985	358	23,728	2,071	26,157	328	51	115	317	25,346	79.1	58.37
1986	317	24,371	2,129	26,817	521	52	110	311	25,823	79.8	57.75
1987 F	311	23,450	2,250	26,011	630	54	110	300	24,917	76.3	64-65
1988 F	300	22,358	2,275	24,933	500	60	110	325	23,938	72.9	62-68
Pork:											
1985	274	14,807	1,128	16,209	128	131	70	229	15,651	62.1	44.77
1986	229	14,063	1,122	15,414	86	132	73	197	14,927	58.6	51.19
1987 F	197	14,205	1,200	15,602	100	136	80	200	15,087	58.7	53-54
1988 F	200	15,715	1,225	17,140	120	140	80	275	16,525	63.7	37-43
Veal:											
1985	14	515	20	549	4	1	7	11	526	1.8	62.42
1986	11	524	27	562	5	1	6	7	543	1.9	60.89
1987 F	7	440	20	467	6	1	7	7	446	1.5	77-78
1988 F	7	415	25	447	5	1	7	7	427	1.5	75-81
Lamb and mutton:											
1985	7	358	36	401	1	2	0	13	385	1.4	68.61
1986	13	338	41	392	1	2	0	12	376	1.4	69.46
1987 F	12	314	45	371	2	2	0	8	359	1.3	79-80
1988 F	8	337	50	395	2	1	0	9	383	1.4	70-76
Total red meat:											
1985	653	39,408	3,255	43,316	461	185	192	570	41,908	144.5	NA
1986	570	39,296	3,319	43,185	613	187	189	527	41,670	141.7	NA
1987 F	527	38,409	3,515	42,450	738	193	197	515	40,808	137.8	NA
1988 F	515	38,825	3,575	42,915	627	202	197	616	41,273	139.1	NA
Broilers:											
1985	20	13,762	0	13,781	417	143	34	27	13,161	55.5	50.8
1986	27	14,316	0	14,342	566	149	35	24	13,568	56.7	56.9
1987 F	24	15,504	0	15,528	774	141	33	25	14,554	60.2	47-48
1988 F	25	16,282	0	16,307	650	140	36	25	15,456	63.4	40-46
Mature chicken:											
1985	119	636	0	755	21	1	2	144	587	2.5	NA
1986	144	629	0	773	16	3	2	163	589	2.5	NA
1987 F	163	651	0	814	24	3	2	130	654	2.7	NA
1988 F	130	652	0	782	20	4	1	135	622	2.6	NA
Turkeys:											
1985	125	2,942	0	3,067	27	7	13	150	2,870	12.1	75.5
1986	150	3,271	0	3,422	27	4	10	178	3,202	13.4	72.2
1987 F	178	3,827	0	4,005	30	2	15	300	3,657	15.1	56-57
1988 F	300	4,072	0	4,372	30	4	16	200	4,122	16.9	51-57
Total poultry:											
1985	264	17,340	0	17,604	465	151	49	321	16,619	70.1	NA
1986	321	18,216	0	18,537	609	156	47	365	17,359	72.5	NA
1987 F	365	19,982	0	20,347	829	147	51	455	18,866	78.0	NA
1988 F	455	21,007	0	21,462	700	148	53	360	20,201	82.8	NA
Red meat & poultry:											
1985	917	56,748	3,255	60,920	926	336	241	891	58,526	214.6	NA
1986	891	57,512	3,319	61,722	1,222	343	236	892	59,029	214.3	NA
1987 F	892	58,391	3,515	62,797	1,567	339	248	970	59,673	215.9	NA
1988 F	970	59,832	3,575	64,377	1,327	350	250	976	61,474	221.9	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: choice steers, Omaha 900-1,100 lbs.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo. Broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry. NA = not available. F = forecast.

Information contact: Ron Gustafson, Leland Southard, or Mark Weimar (202) 786-1830.

Table 11.—U.S. Egg Supply &amp; Use

	Total Egg Supply									Civilian consumption		
	Beg. stocks	Pro-duction	Im-ports	Total supply	Ex-ports	Ship-ments	Mill-itary use	Hatch-ing use	Ending stocks			Wholesale price*
										Total	Per capita	
Million dozen												
1983	20.3	5,659.2	23.4	5,703.0	85.8	26.6	25.1	500.0	9.3	5,056.2	260.8	75.2
1984	9.3	5,708.2	32.0	5,749.5	58.2	27.8	17.6	529.7	11.1	5,105.1	260.9	80.9
1985	11.1	5,688.4	12.7	5,712.2	70.6	30.3	20.2	548.1	10.7	5,032.2	254.7	66.4
1986	10.7	5,714.9	13.7	5,739.3	101.6	28.0	17.5	565.9	10.4	5,016.1	251.5	71.1
1987 F	10.4	5,780.0	6.8	5,797.2	110.3	23.1	18.6	591.1	10.0	5,044.1	250.4	62-64
1988 F	10.0	5,750.0	8.0	5,768.0	105.0	24.0	20.0	625.0	10.0	4,984.0	245.2	60-66

\* Cartoned Grade A large eggs in New York. F = forecast. Information contact: Mark Weimar (202) 786-1830.

Table 12.—U.S. Milk Supply & Use<sup>1</sup>

Calendar year	U.S. Milk Supply									
	Pro-duction	Farm use	Commercial			Total commercial supply	CCC net re-movals	Commercial		All milk price 2/
			Farm market-ings	Beg. stocks	Im-ports			Ending stocks	Disap-pearance	
\$/cwt										
1980	128.4	2.4	126.1	5.4	2.1	133.6	8.8	5.8	119.0	13.05
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986 P	144.1	2.6	141.5	4.6	2.7	149.1	10.6	4.2	134.0	12.51
1987 F	142.0	2.6	139.4	4.2	2.7	146.3	5.5	4.3	136.5	12.60

<sup>1</sup>/ Milkfat basis. \* Totals may not add because of rounding. <sup>2</sup>/ Delivered to plants and dealers; does not reflect deductions. P = preliminary. F = forecast.

Information contact: Jim Miller (202) 786-1830.

Table 13.—Poultry &amp; Eggs

	Annual			1986		1987					
	1984	1985	1986	Aug	Mar	Apr	May	June	July	Aug	
<b>Broilers</b>											
Federally inspected slaughter, certified (mil lb)	12,998.6	13,569.2	14,265.6	1,181.0	1,298.0	1,277.1	1,261.0	1,371.5	1,336.6	1,236.5	
Wholesale price, 12-city, (cts/lb)	55.6	50.8	56.9	69.7	48.5	48.6	50.5	45.3	46.8	52.6	
Price of grower feed (\$/ton)	233	197	NA	191	176	185	182	184	194	192	
Broiler-feed price ratio 1/	2.8	3.1	NA	4.6	3.3	3.2	3.3	3.0	2.9	3.3	
Stocks beginning of period (mil lb)	21.2	19.7	26.6	24.0	23.5	25.1	26.9	26.9	24.2	24.8	
Broiler-type chicks hatched (mil) 2/	4,593.9	4,803.8	5,013.3	416.0	457.2	454.3	471.2	458.3	458.9	449.9	
<b>Turkeys</b>											
Federally inspected slaughter, certified (mil lb)	2,574	2,800	3,133	299.4	241.0	256.8	274.2	335.8	358.8	353.5	
Wholesale price, Eastern U.S., 8-16 lb young hens (cts/lb)	74.4	75.5	72.2	80.5	60.3	58.3	55.3	55.7	56.3	56.1	
Price of turkey grower feed (\$/ton)	245	212	NA	221	209	209	212	209	214	217	
Turkey-feed price ratio 1/	3.8	4.4	NA	4.6	3.6	3.5	3.3	3.3	3.1	2.9	
Stocks beginning of period (mil lb)	161.8	125.3	150.2	388.1	211.4	226.6	250.9	301.4	381.1	472.5	
Poults placed in U.S. (mil)	190.0	197.8	225.4	16.4	25.2	26.1	26.6	27.0	26.0	20.0	
<b>Eggs</b>											
Farm Production (mil)	68,498	68,261	68,579	5,713	6,040	5,800	5,830	5,620	5,790	5,790	
Average number of layers (mil) 3/	278	277	278	227	236	233	231	229	229	231	
Rate of lay (eggs per layer on farms) 3/	245	247	247	20.9	21.4	20.8	21.1	20.3	20.8	20.8	
Cartoned price, New York, grade A large (cts/doz) 4/	80.9	66.4	71.1	72.8	62.0	62.4	55.6	58.7	59.1	63.2	
Price of laying feed (\$/ton)	206	182	NA	171	165	166	167	167	177	178	
Egg-feed price ratio 1/	6.8	6.3	NA	7.3	6.6	6.7	6.0	6.1	5.8	5.7	
<b>Stocks, first of month</b>											
Shell (mil doz)	.39	.93	.72	.75	.75	.96	.84	1.14	.85	1.02	
Frozen (mil doz)	8.9	10.2	10.0	11.5	10.2	11.0	11.3	13.2	12.9	13.1	
Replacement chicks hatched (mil)	459	407	425	33.4	42.3	42.1	41.4	38.0	33.5	35.3	

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks are currently reported for 12 states only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Monthly data only available for 20 states. 4/ Price of cartoned eggs to volume buyers for delivery to retailers. NA = not available.

Information contact: Mark Weimar (202) 786-1830.



Table 14.—Dairy

	Annual			1986	1987					
	1984	1985	1986	Aug	Mar	Apr	May	June	July	Aug
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	12.29	11.48	11.30	11.33	11.03	11.00	11.00	11.07	11.17	11.27
Wholesale prices										
Butter, Grade A Chl. (cts/lb)	148.8	141.1	144.5	153.9	137.8	138.8	138.4	144.6	149.0	148.1
Am. cheese, Wis assembly pt. (cts/lb)	138.0	127.7	127.3	129.5	122.2	122.4	122.0	122.0	123.2	125.5
Nonfat dry milk, (cts/lb) 2/	90.9	84.0	80.6	80.6	78.9	79.0	79.1	79.2	79.2	79.6
USDA net removals										
Total milk equiv. (mil lb) 3/	8,637.0	13,174.1	10,628.1	111.0	646.5	598.8	519.4	384.5	157.8	148.9
Butter (mil lb)	202.3	334.2	287.6	-4.5	16.9	13.6	14.0	4.0	-2	1.0
Am. cheese (mil lb)	447.3	629.0	468.4	20.2	29.9	32.0	23.2	30.1	15.7	12.2
Nonfat dry milk (mil lb)	678.4	940.6	827.3	46.6	57.7	61.0	58.8	67.2	53.2	39.6
Milk										
Milk prod. 21 states (mil lb)	114,545	121,043	122,185	10,169	10,376	10,378	10,957	10,491	10,433	10,270
Milk per cow (lb)	12,691	13,160	13,445	1,133	1,180	1,182	1,249	1,196	1,188	1,171
Number of milk cows (thou)	9,026	9,198	9,088	8,974	8,792	8,780	8,772	8,771	8,785	8,772
U.S. milk production (mil lb)	135,450	143,147	144,080	6/11,930	6/12,261	6/12,218	6/12,841	6/12,282	6/12,226	6/12,015
Stocks, beginning										
Total (mil lb)	22,646	16,704	13,695	17,974	13,071	13,319	13,101	13,310	12,724	11,770
Commercial (mil lb)	5,234	4,937	4,590	5,284	4,363	4,446	4,413	5,161	5,661	5,696
Government (mil lb)	17,412	11,767	9,105	12,690	8,709	8,873	8,288	8,148	7,063	6,074
Imports, total (mil lb) 3/	2,741	2,777	2,733	212	195	167	145	160	244	NA
Commercial disappearance milk equiv. (mil lb)	126,912	130,640	134,049	11,750	11,512	11,209	11,902	11,347	12,077	NA
Butter										
Production (mil lb)	1,103.3	1,247.8	1,202.4	69.9	107.6	104.2	101.7	83.1	76.2	67.6
Stocks, beginning (mil lb)	499.4	296.5	205.5	337.6	231.6	254.0	247.9	250.2	237.9	211.2
Commercial disappearance (mil lb)	902.7	918.2	922.9	72.8	91.5	86.3	79.3	63.2	79.2	NA
American cheese										
Production (mil lb)	2,648.5	2,855.2	2,798.2	219.2	238.7	246.0	264.3	246.1	240.6	208.5
Stocks, beginning (mil lb)	1,161.5	960.5	850.2	935.7	635.3	614.8	603.5	624.4	603.0	577.8
Commercial disappearance (mil lb)	2,253.6	2,279.1	2,382.8	200.5	200.4	190.1	228.8	202.0	220.4	NA
Other cheese										
Production (mil lb)	2,025.5	2,225.7	2,411.0	202.5	217.2	212.4	220.4	217.7	217.6	215.0
Stocks, beginning (mil lb)	104.9	101.4	94.1	100.5	88.1	89.4	91.8	97.1	94.4	95.2
Commercial disappearance (mil lb)	2,310.9	2,515.7	2,684.9	222.9	237.1	225.4	231.2	238.1	242.3	NA
Nonfat dry milk										
Production (mil lb)	1,160.7	1,390.0	1,284.1	90.4	87.8	101.4	118.6	104.8	98.6	80.0
Stocks, beginning (mil lb)	1,405.2	1,247.6	1,011.1	997.2	559.7	512.9	460.8	485.5	428.7	334.7
Commercial disappearance (mil lb)	497.8	435.0	479.1	45.9	36.2	35.8	38.3	41.3	57.9	NA
Frozen dessert										
Production (mil gal) 4/	1,241.8	1,251.0	1,248.6	124.4	107.5	113.0	118.8	134.6	135.9	123.3

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process.  
3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated. P = preliminary. NA = not available.

Information contact: Jim Miller (202) 786-1830.

Table 15.—Wool

	Annual			1986	1987					
	1984	1985	1986	Aug	Mar	Apr	May	June	July	Aug
U.S. wool price, Boston 1/ (cts/lb)	229	192	191	190	216	260	270	270	270	300
Imported wool price, Boston 2/ (cts/lb)	241	197	201	177	234	248	250	250	243	251
U.S. mill consumption, scoured										
Apparel wool (thou lb)	128,982	106,051	126,768	9,414	14,426	11,608	11,328	13,558	9,661	9,952
Carpet wool (thou lb)	13,088	10,562	9,960	983	1,308	1,209	1,190	934	1,162	1,567

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals

	Annual			1986	1987					
	1984	1985	1986	Aug	Mar	Apr	May	June	July	Aug
Cattle on feed (7-States)										
Number on feed (thou head) 1/	8,006	8,635	7,920	6,331	7,143	7,222	7,233	7,520	7,193	6,689
Placed on feed (thou head)	20,772	19,346	20,005	1,802	1,754	1,726	1,954	1,462	1,264	1,897
Marketings (thou head)	18,785	18,989	19,243	1,659	1,586	1,581	1,524	1,702	1,694	1,700
Other disappearance (thou head)	1,376	1,132	1,049	70	89	134	143	87	74	68
Beef steer-corn price ratio.										
Omaha 2/	21.6	23.3	31.0	36.6	41.6	42.3	40.1	38.8	41.0	44.0
Hog-corn price ratio, Omaha 2/	16.1	17.8	27.8	39.3	32.6	32.7	31.6	34.3	38.4	41.3
Market prices (\$ per cut)										
Slaughter cattle:										
Choice steers, Omaha	65.34	58.37	57.75	59.04	61.58	66.30	70.66	68.83	65.80	64.50
Utility cows, Omaha	39.81	38.32	37.19	37.62	45.01	44.23	44.36	44.72	45.64	46.35
Choice vealers, S. St. Paul	63.95	58.28	59.92	62.50	70.00	75.00	90.00	90.63	77.50	79.22
Feeder cattle:										
Choice, Kansas City, 600-700 lb.	65.28	64.56	62.79	65.75	71.13	72.90	73.38	74.00	76.20	79.38
Slaughter hogs:										
Barrows & gilts, 7-markets	48.86	44.77	51.19	63.39	48.22	51.85	55.58	61.08	61.85	60.35
Feeder pigs:										
S, Mo. 40-50 lb (per head)	39.12	37.20	45.62	56.44	54.98	56.00	51.66	45.89	45.60	48.05
Slaughter sheep & lambs:										
Lambs, Choice, San Angelo	62.18	68.61	69.46	68.12	86.50	93.12	94.50	84.83	76.83	71.83
Ewes, Good, San Angelo	20.90	34.02	34.78	34.88	42.50	38.05	36.25	34.62	36.62	38.67
Feeder lambs:										
Choice, San Angelo	61.02	85.91	73.14	80.00	108.50	109.40	112.62	94.56	98.75	98.00
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb.	98.01	90.76	88.98	90.98	92.86	100.56	107.80	105.71	99.29	95.45
Canner & Cutter cow beef	74.70	74.13	71.31	71.50	84.58	82.19	82.05	84.15	84.51	85.63
Pork loins, 8-14 lb. 3/	96.36	91.51	104.78	125.73	93.25	102.21	120.77	124.38	121.73	123.50
Pork bellies, 12-14 lb.	60.08	59.50	65.82	89.10	60.02	65.79	67.21	78.44	83.62	80.46
Hams, skinned, 14-17 lb.	78.22	67.50	80.01	92.16	71.97	72.66	70.98	78.91	79.93	86.15
Commercial slaughter (thou head)*										
Cattle	37,582	36,293	37,288	3,203	2,904	2,971	2,872	3,035	3,098	3,054
Steers	17,474	16,912	17,516	1,497	1,413	1,523	1,438	1,527	1,562	1,492
Heifers	10,691	11,237	11,097	1,009	892	855	852	901	915	958
Cows	8,617	7,391	7,960	635	541	534	522	547	561	547
Bulls & stags	789	758	715	62	58	59	60	60	60	58
Calves	3,297	3,385	3,408	278	266	228	202	227	232	214
Sheep & lambs	6,759	6,165	5,635	416	442	496	373	421	426	416
Hogs	85,168	84,492	79,598	5,972	6,966	6,665	6,078	6,158	6,187	6,175
Commercial production (mil lb)										
Beef	23,418	23,557	24,213	2,076	1,907	1,928	1,851	1,958	2,017	2,005
Veal	479	499	509	41	38	34	32	35	34	30
Lamb & mutton	371	352	331	25	27	29	22	24	25	24
Pork	14,720	14,728	13,988	1,037	1,226	1,168	1,070	1,086	1,082	1,074
	Annual			1986			1987			
	1984	1985	1986	II	III	IV	I	II	III	IV
Cattle on feed (13-States)										
Number on feed (thou head) 1/	9,908	10,653	9,754	8,945	7,970	8,197	9,235	8,797	8,666	---
Placed on feed (thou head)	24,917	23,366	23,553	5,221	6,336	6,726	5,700	5,961	---	---
Marketings (thou head)	22,540	22,887	22,836	5,821	5,876	5,376	5,767	5,669	5/6,118	---
Other disappearance (thou head)	1,632	1,398	1,236	375	233	312	371	423	---	---
Hogs & pigs (10-States) 4/										
Inventory (thou head) 1/	42,420	41,100	39,870	38,210	37,845	39,335	39,870	39,235	40,580	42,825
Breeding (thou head) 1/	5,348	5,258	5,155	4,948	4,840	4,840	5,155	5,230	5,290	5,295
Market (thou head) 1/	37,072	35,842	34,715	33,262	33,005	34,495	34,715	34,005	35,290	37,530
Farrowings (thou head)	9,020	8,831	8,208	2,161	2,034	2,150	1,957	2,337	2,262	5/2,307
Pig crop (thou head)	67,680	67,648	63,714	16,878	15,853	16,729	15,156	18,485	17,520	---

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live-weight. 3/ Beginning January 1984 prices are for 14-17 lbs.; January 1986 prices are for 14-18 lbs. 4/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 5/ Intentions. \*Classes estimated.

Information contact: Ron Gustafson or Leland Southard (202) 786-1830.



# Crops and Products

Table 17.—Supply & Utilization<sup>1,2</sup>

	Area			Yield	Production	Total supply <sup>4/</sup>	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price <sup>5/</sup>
	Set aside <sup>3/</sup>	Planted	Harvested									
	Mill. acres		Bu/acre									
<b>Wheat</b>												
1982/83	5.8	86.2	77.9	35.5	2,765	3,932	195	713	1,509	2,417	1,515	3.45
1983/84	30.0	76.4	61.4	38.4	2,420	3,839	369	742	1,429	2,540	1,399	3.51
1984/85	18.6	79.2	66.9	38.8	2,599	4,003	405	749	1,424	2,578	1,425	3.38
1985/86*	18.8	75.6	64.7	37.5	2,425	3,866	270	776	815	1,961	1,905	3.08
1986/87*	19.5	72.0	60.7	34.4	2,082	4,018	386	806	1,004	2,197	1,821	2.42
1987/88*	23.7	65.8	55.9	37.6	2,105	3,941	375	830	1,225	2,430	1,511	2.40-2.60
	Mill. acres		Bu/acre					Mill. bu				\$/bu
<b>Rice</b>												
1982/83	0.42	3.30	3.26	4,710	153.6	203.4	--	5/62.9	68.9	131.8	71.5	7.91
1983/84	1.74	2.19	2.17	4,598	99.7	171.8	--	6/54.7	70.3	125.0	46.9	8.57
1984/85	.79	2.83	2.60	4,954	136.8	187.3	--	8/60.5	62.1	122.6	64.7	8.04
1985/86*	1.24	2.51	2.49	5,414	124.8	201.8	--	8/65.8	58.7	124.5	77.3	6.53
1986/87*	1.26	2.40	2.38	5,648	134.4	214.3	--	6/73.8	88.4	159.2	55.1	3.80
1987/88*	1.38	2.34	2.32	5,471	126.8	184.5	--	6/77.0	80.0	157.0	27.5	6.00-7.00
	Mill. acres		Bu/acre					Mill. bu				\$/bu
<b>Corn</b>												
1982/83	2.1	81.9	72.7	113.2	8,235	10,772	4,521	894	1,834	7,249	3,523	2.55
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.21
1984/85	3.9	80.5	71.9	106.7	7,674	8,684	4,079	1,091	1,865	7,036	1,648	2.63
1985/86*	5.4	83.4	75.2	118.0	8,877	10,536	4,095	1,160	1,241	6,496	4,040	2.23
1986/87*	13.6	76.7	69.2	119.3	8,253	12,294	4,696	1,191	1,525	7,412	4,882	1.50
1987/88*	21.1	66.0	59.6	119.9	7,139	12,023	4,800	1,225	1,600	7,625	4,398	1.60-1.90
	Mill. acres		Bu/acre					Mill. bu				\$/bu
<b>Sorghum</b>												
1982/83	0.7	16.0	14.1	59.1	835	1,154	496	10	210	715	439	2.47
1983/84	7.7	11.9	10.0	48.7	488	827	385	10	245	640	287	2.74
1984/85	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86*	.9	18.3	16.8	66.8	1,120	1,420	664	26	178	869	581	1.93
1986/87*	2.3	15.3	13.9	67.7	942	1,483	546	15	200	761	732	1.37
1987/88*	3.9	11.8	10.5	71.1	747	1,478	550	15	225	790	688	1.50-1.75
	Mill. acres		Bu/acre					Mill. bu				\$/bu
<b>Barley</b>												
1982/83	0.4	9.5	9.0	57.2	516	678	241	170	47	458	217	2.18
1983/84	1.1	10.4	9.7	52.3	509	733	282	170	82	544	189	2.47
1984/85	1.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.28
1985/86*	.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1986/87*	1.8	13.1	12.0	50.8	611	842	276	174	137	586	356	1.61
1987/88*	2.9	11.0	10.1	51.7	518	879	275	175	125	575	304	1.55-1.85
	Mill. acres		Bu/acre					Mill. bu				\$/bu
<b>Oats</b>												
1982/83	0.1	14.0	10.3	57.8	583	749	441	85	3	529	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86*	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87*	.4	14.7	6.9	56.3	366	603	395	73	3	471	133	1.21
1987/88*	.9	18.0	7.3	53.4	370	537	350	75	11	426	111	1.30-1.70
	Mill. acres		Bu/acre					Mill. bu				\$/bu
<b>Soybeans</b>												
1982/83	0	70.9	69.4	31.5	2,180	2,444	7/86	1,108	805	2,099	345	5.69
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/79	983	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/83	1,030	598	1,721	316	5.84
1985/86*	0	63.1	61.6	34.1	2,088	2,415	7/86	1,053	740	1,879	536	5.05
1986/87*	0	60.4	58.3	33.3	1,940	2,476	7/101	1,179	760	2,040	436	4.80
1987/88*	0	58.7	57.6	34.2	1,968	2,404	7/84	1,200	700	1,994	410	4.70-5.00
	Mill. acres		Bu/acre					Mill. bu				\$/bu
<b>Soybean oil</b>												
1982/83	--	--	--	--	12,041	13,144	--	9,858	2,025	11,883	1,261	20.6
1983/84	--	--	--	--	10,872	12,133	--	9,588	1,824	11,412	721	30.6
1984/85	--	--	--	--	11,468	12,208	--	9,817	1,660	11,577	632	28.5
1985/86*	--	--	--	--	11,617	12,257	--	10,053	1,257	11,310	947	18.0
1986/87*	--	--	--	--	12,793	13,740	--	10,800	1,100	11,900	1,840	15.4
1987/88*	--	--	--	--	13,000	14,840	--	11,200	1,400	12,600	2,240	15.5
								Thou. tons				\$/ton
<b>Soybean meal</b>												
1982/83	--	--	--	--	26,714	26,889	--	19,306	7,108	26,415	474	187
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,975	255	188
1984/85	--	--	--	--	24,529	24,784	--	19,480	4,917	24,397	387	125
1985/86*	--	--	--	--	24,951	25,338	--	19,090	6,036	25,126	212	155
1986/87*	--	--	--	--	27,738	27,950	--	20,350	7,300	27,650	300	163
1987/88*	--	--	--	--	28,380	28,660	--	21,060	7,300	28,360	300	163

See footnotes at end of table

Table 17.— Supply &amp; Utilization, continued

	Area			Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price \$/
	Set aside 3/	Planted	Harvested									
	Mill. acres			lb/acre				Mill. bales				c/lb
Cotton 10/												
1982/83	1.6	11.3	9.7	590	12.0	18.6	--	5.5	5.2	10.7	7.9	59.5
1983/84	6.8	7.9	7.3	508	7.8	15.7	--	5.9	6.8	12.7	2.8	65.3
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.7
1985/86*	3.6	10.7	10.2	630	13.4	17.6	--	6.4	2.0	8.4	9.4	56.5
1986/87*	3.3	10.0	8.5	552	9.7	19.1	--	7.4	6.7	14.1	5.0	52.2
1987/88*	3.1	10.4	10.0	640	13.3	18.4	--	7.7	7.0	14.7	3.8	--

\*October 8, 1987 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum, October 1 for soybean oil, and soybean meal. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3678 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt. of rice, and 4.58 480-pound bales of cotton. 3/ Includes diversion, PIR, acreage reduction and conservation reserve programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 41 Percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1986		1987				
	1983/84	1984/85	1985/86	1986/87	Aug	Apr	May	June	July	Aug	
Wholesale prices											
Wheat, No. 1 HRW,											
Kansas City (\$/bu) 2/	3.84	3.74	3.28	2.72	2.48	2.90	3.02	2.70	2.59	2.50	
Wheat, DNS,											
Minneapolis (\$/bu) 2/	4.24	3.70	3.25	2.62	2.39	2.60	2.76	2.66	2.52	2.60	
Rice, S.W. Lo. (\$/cwt) 3/	19.38	17.98	16.11	10.25	10.63	10.38	10.38	10.50	10.50	11.00	
Wheat											
Exports (mil bu)	1,429	1,424	915	1,004	124	73	72	126	166	NA	
Mill grind (mil bu)	694	676	711	779	67	64	68	65	63	NA	
Wheat flour production (mil cwt)	308	301	320	351	30	28	30	29	28	NA	
Rice											
Exports (mil cwt, rough equiv)	70.3	62.1	58.7	85.4	11.4	5.9	6.0	3.6	10.0	NA	
	Marketing year 1/				1986		1987				
	1984/85	1985/86	1986/87		Jan-Mar	Apr-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug
Wheat											
Stocks, beginning (mil bu)	1,399	1,425	1,905	2,526.1	2,130.0	1,905.0	3,154.6	2,671.5	2,249.8	1,820.9	
Domestic use											
Food (mil bu)	651	683	714	166.9	110.7	174.1	192.2	177.2	180.2	190.0	
Feed & seed (mil bu) 4/	502	363	548	4.9	1.8	346.8	31.1	47.6	38.7	376.0	
Exports (mil bu)	1,424	915	1,004	226.1	115.3	320.6	263.4	202.7	216.8	415.0	

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. NA = not available.

Information contacts: Allen Schienbein and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1986		1987				
	1983/84	1984/85	1985/86	1986/87	Aug	Apr	May	June	July	Aug	
U.S. price, SLM,											
1-1/16 in. (cts/lb) 2/	73.1	60.5	60.0	53.2	26.8	57.7	65.9	70.4	73.1	75.9	
Northern Europe prices:											
Index (cts/lb) 3/	87.6	69.2	48.9	62.0	37.8	66.2	76.6	79.3	83.2	86.6	
U.S. M 1-3/32 in. (cts/lb) 4/	87.1	73.9	64.8	61.8	37.2	65.2	75.1	76.2	81.8	87.4	
U.S. mill consumption (thou bales)	5,927	5,545	6,399	7,452	581	661	642	655	634	643	
Exports (thou bales)	6,786	6,201	1,969	6,684	393	660	488	468	575	373	
Stocks, beginning (thou bales)	7,937	2,775	4,102	9,348	9,348	9,749	8,428	7,298	6,176	5,026	

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook (A) index; average of five lowest priced of 10 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.



Table 20.—Feed Grains

	Marketing year 1/				1986	1987				
	1983/84	1984/85	1985/86	1986/87	Aug	Apr	May	June	July	Aug
<b>Wholesale prices</b>										
Corn, No. 2 yellow, Chicago (\$/bu)	3.46	2.79	2.35 <sup>2</sup>	1.64	1.68	1.69	1.89	1.88	1.68	1.53
Sorghum, No. 2 yellow, Kansas City (\$/cwt)	5.22	4.46	3.72	2.73	2.71	2.85	3.10	3.20	2.80	2.55
Barley, feed, Minneapolis (\$/bu) 2/	2.48	2.09	1.53	1.60	1.13	1.76	1.86	1.73	1.59	1.60
Barley, malting, Minneapolis (\$/bu)	2.84	2.55	2.24	1.89	1.61	2.05	2.12	2.07	1.93	1.73
<b>Exports</b>										
Corn (mil bu)	1,902	1,865	1,241	NA	NA	185	171	121	135	NA
Feed grains (mil metric tons) 3/	56.5	56.6	36.6	46.8	NA	5.4	4.9	3.4	NA	NA
	Marketing year 1/				1986	1987				
	1983/84	1984/85	1985/86	1986/87	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug
<b>Corn</b>										
Stocks, beginning (mil bu)	3,523	1,006	1,648	4,040	6,587	4,990	4,040	10,304	8,248	6,332
<b>Domestic use:</b>										
Feed (mil bu)	3,818	4,079	4,095	4,696	1,086	494	1,388	1,471	1,089	749
Food, seed, ind. (mil bu)	975	1,091	1,160	1,191	309	308	280	270	325	315
Exports (mil bu)	1,902	1,865	1,241	1,525	204	154	321	315	502	386
Total use (mil bu)	6,694	7,036	6,496	7,412	1,599	956	1,989	2,056	1,917	1,451

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Aggregated data for corn, sorghum, oats, and barley. NA = not available.

Information contacts: Larry Van Meir (202) 786-1840.

Table 21.—Fats &amp; Oils

	Marketing year 1/				1986	1987				
	1982/83	1983/84	1984/85	1985/86	July	Mar	Apr	May	June	July
<b>Soybeans</b>										
Wholesale price, No. 1 yellow, Chicago (\$/bu) 2/	6.11	7.78	5.88	5.20	5.25	4.86	5.10	5.46	5.56	5.31
Crushings (mil bu)	1,107.8	982.7	1,030.5	1,052.8	83.1	106.0	95.9	95.3	90.6	92.6
Exports (mil bu)	905.2	742.8	598.2	740.0	26.6	67.8	53.9	37.6	37.9	54.3
Stocks, beginning (mil bu)	254.5	344.6	175.7	316.0	40.7	105.4	90.2	85.2	72.9	63.6
<b>Soybean oil</b>										
Wholesale price, crude, Decatur (cts/lb)	20.62	30.55	29.52	18.0	16.22	15.21	15.31	16.22	15.96	15.41
Production (mil lb)	12,040.4	10,872.0	11,467.9	11,620.4	909.5	1,149.0	1,047.1	1,037.6	980.9	1,013.7
Domestic disap. (mil lb)	9,857.3	9,598.6	9,916.7	10,062.8	769.2	761.6	1,027.1	918.2	973.2	NA
Exports (mil lb)	2,024.7	1,813.6	1,659.8	1,257.2	44.6	52.1	28.2	47.4	85.0	175.6
Stocks, beginning (mil lb)	1,102.5	1,260.9	720.5	632.5	1,225.2	2,017.0	2,352.3	2,344.1	2,416.0	980.9
<b>Soybean meal</b>										
Wholesale price, 44% protein, Decatur (\$/ton)	187.19	188.21	125.46	154.90	161.00	146.60	159.00	174.90	187.10	181.25
Production (thou ton)	26,713.6	22,756.2	24,529.3	24,957.8	1,976.6	2,489.1	2,256.4	2,245.6	2,134.9	2,185.1
Domestic disap. (thou ton)	19,306.0	17,615.2	19,481.7	19,122.3	1,600.5	1,538.4	1,593.4	1,740.1	1,739.5	1,673.4
Exports (thou ton)	7,108.7	5,359.7	4,916.5	6,007.0	404.2	992.4	654.8	427.8	455.8	480.3
Stocks, beginning (thou ton)	175.2	474.1	255.4	387.0	278.7	277.5	235.8	244.0	321.7	261.3
<b>Margarine, wholesale price, Chicago, white (cts/lb)</b>										
	41.1	46.3	55.4	42.1	39.00	39.20	39.38	40.13	39.50	38.88

1/ Beginning September 1 for soybeans; October 1 for soybean oil; calendar year for margarine. 2/ Beginning April 1, 1982. Prices based on 30-day delivery, using upper end of the range. NA = Not available.

Information contacts: Roger Hoskin (202) 786-1840; Tom Bickerton (202) 786-1691.

Table 22.—Farm Programs, Price Supports, Participation &amp; Payment Rates

	Target price	Loan rate	Findlay loan rate	Payment rates			Base acres	Program 1/	Participation rate 2/
				Deficiency	Paid land diversion	PIK			
				\$/bu.		Percent 3/	\$11. acres		Percent of base
<b>Wheat</b>									
1982/83	4.05	3.55		.50			90.7	15/0/0	48
1983/84	4.30	3.65		.65	2.70	85	90.9	15/5/10-30	79/78/51
1984/85	4.38	3.90		1.00	2.70	85	84.0	20/10/10-20	60/60/20
1985/86	4.38	3.90		1.08	2.70		84.0	20/10/0	73
1986/87 4/	4.38	3.00	2.40	1.98	2.00	1.10	81.7	22.5/8 or 10/2.5	94/21/84
1987/88	4.38	2.85	2.28	2.10			89.6	27.5/0/0	83
<b>Rice</b>									
				\$/cwt					
1982/83	10.85	8.14		2.71			3.87	15/0/0	78
1983/84	11.40	8.14		2.77	2.70	80	3.95	15/5/10-30	98/96/87
1984/85	11.90	8.00		3.75			4.16	25/0/0	85
1985/86	11.90	8.00	5/3.40	3.90	3.50		4.23	20/15/0	89
1986/87 4/	11.90	7.20	5/3.45	4.70			4.20	35/0/0	92
1987/88	11.66	6.84	3/3.50	4.82			4.22	35/0/0	83
<b>Corn</b>									
				\$/bu.					
1982/83	2.70	6/2.85		.15			81.2	10/0/0	28
1983/84	2.86	2.65		0	1.50	80	82.6	10/10/10-30	71/71/60
1984/85	3.03	2.55		.43			80.8	10/0/0	54
1985/86	3.03	2.55		.48			84.2	10/0/0	69
1986/87 4/	3.03	2.40	1.92	1.11	.73		81.9	17.5/2.5/0	85
1987/88	3.03	2.28	1.82	1.21	2.00		83.3	20/15/0	88/55
<b>Sorghum</b>									
				\$/bu.					
1982/83	2.60	2.42		.18			17.7	7/[same]	47
1983/84	2.72	2.52		0	1.50	80	18.0		72/72/53
1984/85	2.88	2.42		.46			18.2		42
1985/86	2.88	2.42		.46			19.3		55
1986/87 4/	2.88	2.28	1.82	1.06	.65		18.7		75
1987/88	2.88	2.18	1.74	1.14	1.80		18.1		83/42
<b>Barley</b>									
				\$/bu.					
1982/83	2.60	2.08		.40			10.5	7/[same]	46
1983/84	2.60	2.15		.21	1.00		11.0		55/55/0
1984/85	2.60	2.08		.26			11.6		44
1985/86	2.60	2.08		.52			13.3		57
1986/87 4/	2.60	1.95	1.56	1.04	.57		12.4		73
1987/88	2.60	1.86	1.49	1.11	1.60		12.8		82/23
<b>Oats</b>									
				\$/bu.					
1982/83	1.50	1.31		0			10.4	7/[same]	14
1983/84	1.60	1.36		.11	.75		9.8		20/20/0
1984/85	1.60	1.31		0			8.8		14
1985/86	1.60	1.31		.29			9.4		14
1986/87 4/	1.60	1.24	.88	.50	.36		8.5		37
1987/88	1.60	1.18	.84	.55	.80		8.7		44/15
<b>Soybeans 8/</b>									
				\$/bu.					
1982/83		5.02							
1983/84		5.02							
1984/85		5.02							
1985/86		5.02							
1986/87 4/		5.02	4.77						
1987/88		5.02	4.77						
<b>Upland cotton</b>									
				\$/lb.					
1982/83	71.0	57.10		13.92			15.3	15/0/0	78
1983/84	76.0	55.00		12.10	25.00	85	15.4	20/5/10-30	93/83/77
1984/85	81.0	55.00		18.60			15.8	25/0/0	70
1985/86	81.0	57.30		23.70	30.00		15.8	20/10/0	82/0/0
1986/87 4/	81.0	55.00	8/44.00	26.00			15.8	25/0/0	91
1987/88	79.4	52.25	10/	27.15			15.0	25/0/0	83

1/ Percentage of base acres farmers participating in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive Program benefits. In addition to the percentages shown for 1983/84, farmers had the option of submitting bids to retire their entire base acreages. 2/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 3/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1983 and 1984 PIK rates apply only to the 10-30 and 10-20 portions, respectively. 4/ Payment rates for payments received in cash were reduced by 8.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 5/ Annual average world market price. 6/ The Reserve loan rate was \$2.90. 7/ The sorghum, barley, and oat programs were the same as for corn each year except 1983/84, when PIK was not offered on barley and oats. 8/ There are no target prices, acreage programs, or payment rates for soybeans. 9/ Loan repayment rate. 10/ Loans may be repaid at the lower of the loan rate or world market prices.

Information contact: Larry Van Meir (202) 786-1840.



Table 23.—Fruit

	Calendar years											
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P
Citrus												
Production (thou ton)	14,788	15,242	14,255	13,325	16,484	15,105	12,057	13,608	10,792	10,488	11,074	11,952
Per capita consumption (lbs) 1/	119.3	117.2	124.5	107.4	108.5	112.7	104.7	109.6	120.2	102.8	115.7	109.8
Non Citrus												
Production (thou tons)	12,384	11,848	12,274	12,460	13,689	15,152	12,861	14,217	14,154	14,292	14,188	13,861
Per capita consumption (lbs) 1/	85.8	84.2	84.3	82.5	85.8	87.3	88.1	89.0	89.0	93.7	92.5	95.3

Table 26.—World Supply &amp; Utilization of Major Crops, Livestock, &amp; Products

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 F	1987/88 F
Million units							
<b>Wheat</b>							
Area (hectare)	238.7	237.7	229.1	231.4	229.3	228.1	220.7
Production (metric ton)	449.5	477.5	489.4	511.5	499.2	528.9	507.4
Exports (metric ton) 1/	101.3	98.7	102.0	107.0	84.6	91.4	94.6
Consumption (metric ton) 2/	443.6	462.2	482.2	495.6	487.5	519.1	520.1
Ending stocks (metric ton) 3/	87.0	102.3	109.5	125.3	137.0	146.8	134.2
<b>Coarse grains</b>							
Area (hectare)	349.9	339.7	335.3	335.5	339.7	336.5	327.2
Production (metric ton)	766.0	784.4	687.0	813.8	845.9	835.5	801.4
Exports (metric ton) 1/	96.6	89.6	93.0	100.6	83.3	95.3	85.7
Consumption (metric ton) 2/	737.7	753.1	761.8	782.9	771.2	805.0	818.9
Ending stocks (metric ton) 3/	120.7	151.8	77.2	108.1	182.8	213.3	195.8
<b>Rice, milled</b>							
Area (hectare)	145.2	141.1	144.3	144.4	144.8	145.4	141.6
Production (metric ton)	280.6	285.7	308.0	319.2	320.0	315.7	301.5
Exports (metric ton) 4/	11.8	11.9	12.6	11.5	12.7	12.2	10.2
Consumption (metric ton) 2/	281.5	290.3	308.7	313.8	316.0	318.2	309.9
Ending stocks (metric ton) 3/	21.3	17.3	17.2	22.3	26.3	23.8	15.5
<b>Total grains</b>							
Area (hectare)	733.8	718.5	708.7	711.3	713.8	710.0	689.5
Production (metric ton)	1,496.1	1,547.6	1,484.4	1,644.5	1,665.1	1,680.1	1,610.3
Exports (metric ton) 1/	209.7	200.2	207.6	219.1	180.6	188.8	190.5
Consumption (metric ton) 2/	1,462.8	1,505.6	1,552.7	1,592.3	1,574.7	1,642.3	1,648.9
Ending stocks (metric ton) 3/	229.0	271.4	203.9	255.7	346.1	383.9	345.5
<b>Oilseeds</b>							
Crush (metric ton)	138.9	143.5	136.6	150.5	154.1	158.5	161.3
Production (metric ton)	169.4	178.2	165.9	191.1	196.1	194.4	202.8
Exports (metric ton)	35.9	35.2	33.0	33.0	34.4	37.7	36.7
Ending stocks (metric ton)	13.5	20.5	15.8	21.2	26.8	23.1	24.4
<b>Meals</b>							
Production (metric ton)	94.5	98.1	92.9	101.8	104.2	108.2	110.1
Exports (metric ton)	28.8	31.6	29.7	32.3	34.2	36.6	35.9
<b>Oils</b>							
Production (metric ton)	41.6	43.4	42.3	46.1	49.3	49.5	50.9
Exports (metric ton)	13.4	14.0	13.7	15.6	16.4	16.5	16.9
<b>Cotton</b>							
Area (hectare)	33.0	31.4	31.0	33.9	31.9	30.2	32.0
Production (bale)	71.2	68.1	67.7	88.1	79.3	70.0	77.7
Exports (bale)	20.2	19.4	19.2	20.5	20.5	25.4	24.0
Consumption (bale)	66.2	68.3	68.7	70.4	76.9	83.2	82.3
Ending stocks (bale)	25.2	25.1	25.1	42.7	45.9	32.3	27.1
	1982	1983	1984	1985	1986	1987 F	1988 F
<b>Red meat</b>							
Production (mil metric tons)	94.8	97.5	99.3	103.3	105.6	105.3	107.1
Consumption (mil metric tons)	93.3	95.8	97.4	101.2	104.7	103.7	105.8
Exports (mil metric tons) 1/	5.8	5.9	5.9	6.2	6.6	6.5	6.7
<b>Poultry</b>							
Production (mil metric tons)	23.7	24.4	25.2	26.2	27.3	29.0	30.1
Consumption (mil metric tons)	23.3	24.3	24.8	25.9	26.9	28.5	29.7
Exports (mil metric tons) 1/	1.4	1.3	1.3	1.2	1.3	1.4	1.4
<b>Dairy</b>							
Milk production (mil metric tons)	396.9	412.5	413.0	417.8	422.8	423.4	NA

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1982 data correspond with 1981/82, etc. F = forecast. NA = not available.

Information contact: Frederic Suris (202) 786-1693.



# U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1986		1987				
	1984	1985	1986	Aug	Mar	Apr	May	June	July	Aug
<b>Export commodities</b>										
Wheat, f.o.b. vessel, Gulf ports (\$/bu)	4.17	3.73	3.19	2.82	3.17	3.13	3.28	2.99	2.89	2.95
Corn, f.o.b. vessel, Gulf ports (\$/bu)	3.50	2.89	2.27	1.89	1.85	1.93	2.08	2.08	1.96	1.82
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu)	3.00	2.64	2.16	1.70	1.87	1.86	2.01	2.01	1.90	1.74
Soybeans, f.o.b. vessel, Gulf ports (\$/bu)	7.38	5.83	5.45	5.38	5.14	5.35	5.71	5.82	5.74	5.51
Soybean oil, Decatur (cts/lb)	30.75	27.03	16.36	14.16	15.03	15.03	15.93	15.57	15.05	14.93
Soybean meal, Decatur (\$/ton)	166.80	127.15	157.62	164.76	146.98	158.48	175.70	187.25	179.84	168.93
Cotton, 8 market avg. spot (cts/lb)	68.37	58.55	53.47	26.81	54.60	57.72	65.94	70.42	73.06	75.89
Tobacco, avg. price at auction (cts/lb)	170.64	172.05	153.93	142.95	146.51	145.59	145.59	145.59	141.80	141.45
Rice, f.o.b. mill, Houston (\$/cwt)	19.47	18.49	14.60	13.00	10.50	10.50	10.50	10.50	10.50	10.50
Inedible tallow, Chicago (cts/lb)	17.47	14.33	9.03	7.81	9.77	12.98	15.13	14.73	15.17	14.50
<b>Import commodities</b>										
Coffee, N.Y. spot (\$/lb)	1.46	1.42	2.01	1.85	1.03	1.02	1.09	1.08	1.00	.96
Rubber, N.Y. spot (cts/lb)	49.70	41.91	42.87	43.45	46.11	47.39	49.06	50.58	53.47	53.73
Cocoa beans, N.Y. (\$/lb)	1.06	.99	.88	.89	.87	.90	.90	.87	.93	.89

Information contact: Mary Teymourian (202) 786-1692.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1986			1987							
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
March 1973=100											
Total U.S. trade 1/	107	108	107	101	99	99	97	96	98	99	97
Nominal											
April 1971=100											
Agricultural trade											
Nominal 2/	4,733	4,794	4,903	5,238	6,102	6,954	7,783	9,838	12,507	14,245	14,933
Real 3/	89	90	88	86	85	85	83*	83*	85*	85*	84*
Soybeans											
Nominal 2/	280	294	305	314	327	343	358	374	394	412	428
Real 3/	75	76	75	72	71	71	69*	69*	70*	71*	71*
Wheat											
Nominal 2/	26,733	27,020	27,616	29,557	34,601	39,700	44,815	57,302	73,477	83,997	88,101
Real 3/	109	110	107	105	104	106	103*	104*	106*	106*	104*
Corn											
Nominal 2/	4,369	4,430	4,534	4,842	5,631	6,407	7,158	9,020	11,436	13,013	13,642
Real 3/	80	80	79	76	76	76	74*	73*	74*	75*	74*
Cotton											
Nominal 2/	236	237	237	234	233	233	272	270	269	269	269
Real 3/	92	92	92	91	90	90	89*	87*	87*	88*	87*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S. dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S. total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. \*Preliminary.

Information contact: Edward Wilson (202) 786-1648.

Table 29.—U.S. Trade Balance

	Fiscal years*								July
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F
\$ million									
<b>Exports</b>									
Agricultural	31,979	40,481	43,780	39,095	34,769	38,027	31,201	26,325	27,500
Nonagricultural	135,839	169,846	185,423	176,310	159,373	170,014	179,236	176,613	NA
Total 1/	167,818	210,327	229,203	215,405	194,142	208,041	210,437	202,938	NA
<b>Imports</b>									
Agricultural	16,186	17,276	17,218	15,481	16,271	18,916	19,740	20,875	20,000
Nonagricultural	177,424	223,590	237,469	233,353	230,629	297,736	313,722	342,855	NA
Total 2/	193,610	240,866	254,687	248,834	246,900	316,652	333,462	363,730	NA
<b>Trade balance</b>									
Agricultural	15,793	23,205	26,562	23,614	18,498	19,111	11,461	5,450	7,500
Nonagricultural	-41,585	-53,744	-52,046	-57,043	-71,256	-127,722	-134,486	-166,242	NA
Total	-25,792	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,792	NA

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986.

1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value).

NA = not available. F = forecast.

Information contact: Steve MacDonald (202) 786-1621.

Table 30.—U.S. Agricultural Exports &amp; Imports

	Fiscal years*				July	Fiscal years*				July
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	Thousand units					\$ million				
Exports										
Animals, live (no) 1/	754	996	570	--	30	276	255	344	--	19
Meats & preps., excl. poultry (mt)	422	427	451	2/500	44	929	906	1,012	--	99
Dairy products (mt)	418	423	481	--	51	393	414	430	500	48
Poultry meats (mt)	225	234	265	400	36	280	257	282	--	36
Fats, oils, & greases (mt)	1,395	1,217	1,355	3/1,200	113	703	608	477	--	37
Hides & skins incl. furskins	--	--	--	--	--	1,318	1,325	1,456	--	135
Cattle hides, whole (no) 1/	24,383	25,456	25,973	--	2,028	1,010	1,019	1,150	--	116
Mink pelts (no) 1/	2,151	2,237	2,697	--	117	67	60	65	--	4
Grains & feeds (mt)	108,194	93,903	74,437	--	9,817	17,304	13,285	9,476	4/9,500	971
Wheat (mt)	41,699	28,523	25,490	29,000	4,318	6,497	4,264	3,259	5/3,100	397
Wheat flour (mt)	1,071	718	1,137	1,400	135	234	164	204	--	25
Rice (mt)	2,293	1,972	2,382	2,400	282	897	677	648	600	63
Feed grains, incl. products (mt)	55,546	55,362	36,293	47,800	4,162	8,217	6,884	3,819	3,800	343
Feeds & fodders (mt)	7,021	6,533	8,381	6/10,000	868	1,216	1,004	1,289	--	123
Other grain products (mt)	564	795	754	--	68	243	293	257	--	23
Fruits, nuts, and preps. (mt)	1,931	1,907	2,003	--	167	1,594	1,687	1,766	--	169
Fruit juices incl. froz. (hl) 1/	5,598	4,641	3,652	--	369	223	200	148	--	16
Vegetables & preps (mt)	1,527	1,420	1,467	--	105	999	946	1,000	--	77
Tobacco, unmanufactured (mt)	227	257	224	200	9	1,433	1,588	1,318	1,200	46
Cotton, excl. linters (mt)	1,481	1,277	482	1,500	93	2,395	1,945	678	1,900	114
Seeds (mt)	252	289	269	--	15	326	352	366	400	18
Sugar, cane or beet (mt)	285	355	375	--	52	74	65	75	--	11
Oilseeds & products (mt)	26,961	23,803	27,557	--	2,098	8,602	6,195	6,266	7/6,200	480
Oilseeds (mt)	20,466	17,886	20,684	8/20,500	1,505	6,254	4,324	4,394	--	322
Soybeans (mt)	19,265	16,621	20,139	20,100	1,477	5,734	3,876	4,174	3,900	307
Protein meal (mt)	5,060	4,606	5,588	6,800	470	1,217	853	1,127	1,300	98
Vegetable oils (mt)	1,435	1,311	1,284	--	122	1,131	1,018	746	--	60
Essential oils (mt)	11	12	7	--	1	96	105	105	--	8
Other	465	443	568	--	47	1,082	1,069	1,126	--	101
Total	143,794	125,967	109,941	129,000	12,648	38,027	31,201	26,325	28,000	2,386
Imports										
Animals, live (no) 1/	1,907	2,120	1,885	--	94	596	569	637	700	28
Meats & preps., excl. poultry (mt)	905	1,123	1,139	--	126	1,931	2,214	2,248	--	277
Beef & veal (mt)	550	674	683	730	83	1,165	1,295	1,252	1,400	173
Pork (mt)	328	416	406	440	39	703	847	900	1,100	96
Dairy products (mt)	382	418	400	410	37	757	763	786	800	80
Poultry and products 1/	--	--	--	--	--	122	93	101	--	11
Fats, oils, & greases (mt)	18	21	22	--	2	13	18	17	--	2
Hides & skins, incl. furskins 1/	--	--	--	--	--	216	240	200	--	16
Wool, unmanufactured (mt)	59	43	53	--	4	193	145	160	--	16
Grains & feeds (mt)	1,805	2,070	2,311	2,500	141	534	604	668	700	56
Fruits, nuts, & preps., excl. juices (mt)	4,036	4,483	4,637	4,850	350	1,634	1,891	1,976	2,300	171
Bananas & plantains (mt)	2,727	3,022	3,042	3,100	232	666	752	740	800	63
Fruit juices (hl) 1/	27,247	35,112	31,539	33,000	2,337	671	995	698	700	55
Vegetables & preps. (mt)	2,093	2,140	2,199	2,250	132	1,314	1,347	1,560	1,600	104
Tobacco, unmanufactured (mt)	190	191	208	210	24	563	556	605	600	66
Cotton, unmanufactured (mt)	32	31	41	--	3	17	17	14	--	0
Seeds (mt)	82	92	89	130	4	97	91	111	100	8
Nursery stock & cut flowers 1/	--	--	--	--	--	292	318	353	--	19
Sugar, cane or beet (mt)	2,829	2,338	1,905	1,500	153	1,144	912	654	--	51
Oilseeds & products (mt)	1,137	1,271	1,508	1,550	156	799	784	639	600	64
Oilseeds (mt)	223	253	197	--	17	95	98	69	--	6
Protein meal (mt)	118	159	138	--	25	21	17	15	--	3
Vegetable oils (mt)	797	859	1,173	--	114	683	670	555	--	55
Beverages excl. fruit juices (hl) 1/	14,120	15,494	15,488	--	1,556	1,547	1,622	1,848	--	181
Coffee, tea, cocoa, spices (mt)	1,776	1,868	1,940	1,870	158	4,777	4,983	6,099	5,000	358
Coffee, incl. products (mt)	1,128	1,128	1,223	1,170	106	3,300	3,244	4,400	3,300	236
Cocoa beans & products (mt)	451	539	507	520	36	1,058	1,285	1,189	1,200	77
Rubber & allied gums (mt)	809	799	801	800	75	854	680	615	700	65
Other	--	--	--	--	--	844	900	885	--	72
Total	--	--	--	--	--	18,916	18,740	20,875	20,500	1,701

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. -- not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-8/ are based on slightly different groups of commodities. Fiscal 1986 exports of categories used in the 1987 forecasts were: 2/ 413 thousand mt. 3/ 1,306 thousand mt. 4/ 9,648 million. 5/ 3,489 million, i.e. includes flour. 6/ 8,218 thousand mt. 7/ 6,439 million. 8/ 20,481 thousand mt. F = forecast.

Information contact: Steve MacDonald (202) 786-1621.



Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal years*				July	Change from year* earlier				July
	1984	1985	1986	1987 F	1987	1984	1985	1986	1987 F	1987
	\$ million					Percent				
Western Europe	9,265	7,183	6,857	7,000	407	-9	-22	-5	2	51
European Community (EC-12)	8,650	6,668	6,442	6,600	382	9	-23	-3	2	53
Belgium-Luxembourg	836	470	361	--	28	3	-44	-23	--	250
France	510	396	431	--	39	-1	-22	9	--	39
Germany, Fed. Rep.	1,260	900	1,001	--	65	-13	-29	11	--	97
Italy	771	677	693	--	23	-4	-12	2	--	-12
Netherlands	2,227	1,926	2,042	--	124	-21	-14	6	--	53
United Kingdom	790	628	628	--	43	-4	-20	0	--	43
Portugal	702	502	308	--	18	10	-28	-39	--	-5
Spain, incl. Canary Islands	1,232	832	723	--	30	3	-32	-13	--	114
Other Western Europe	615	515	415	400	25	-10	-16	-19	0	32
Switzerland	311	232	128	--	10	-12	-26	-45	--	25
Eastern Europe	741	532	447	500	40	-10	-28	-16	0	186
German Dem. Rep.	132	81	52	--	0	7	-38	-36	--	-100
Poland	197	126	42	--	6	-15	-36	-66	--	500
Yugoslavia	180	137	134	--	16	-28	-24	-2	--	100
Romania	155	88	112	--	14	35	-43	27	--	600
USSR	2,512	2,525	1,105	800	168	156	1	-56	-45	1,427
Asia	15,209	11,933	10,498	11,900	1,053	12	-22	-12	13	45
West Asia (Mideast)	1,865	1,452	1,243	1,700	157	26	-22	-14	34	21
Turkey	222	129	111	--	7	693	-42	-13	--	133
Iraq	423	371	321	--	58	31	-12	-13	--	26
Israel	351	300	255	--	27	20	-15	-15	--	-18
Saudi Arabia	497	381	335	--	36	11	-23	-12	--	57
South Asia	867	599	517	400	41	-26	-31	-14	-2	141
Bangladesh	157	205	94	--	24	3	31	-54	--	300
India	376	129	90	--	5	-51	-66	-30	--	-17
Pakistan	285	228	285	--	12	33	-20	25	--	1,100
China	692	239	88	200	26	27	-65	-63	0	2,500
Japan	6,935	5,663	5,139	5,500	430	18	-18	-9	0	34
Southeast Asia	1,218	842	725	800	54	1	-31	-14	14	8
Indonesia	438	204	172	--	9	7	-53	-16	--	-36
Philippines	300	285	270	--	19	-21	-5	-5	--	-5
Other East Asia	3,631	3,138	2,787	3,300	344	10	-14	-11	18	67
Taiwan	1,409	1,342	1,108	--	195	14	-5	-17	--	53
Korea, Rep.	1,816	1,400	1,277	--	40	6	-23	-9	--	93
Hong Kong	407	396	399	--	109	18	-3	1	--	21
Africa	2,868	2,527	2,135	1,800	197	26	-12	-16	-16	2
North Africa	1,542	1,207	1,402	1,300	145	6	-22	16	0	39
Morocco	341	156	159	--	17	52	-54	2	--	100
Algeria	162	220	330	--	24	-20	36	50	--	-25
Egypt	882	766	875	--	102	-3	-13	14	--	42
Sub-Saharan	1,327	1,320	733	500	51	62	-1	-44	-32	-43
Nigeria	345	367	158	--	4	4	6	-57	--	-80
Rep. S. Africa	525	189	70	--	4	304	-64	-63	--	-69
Latin America & Caribbean	5,279	4,570	3,599	3,900	359	9	-13	-21	8	2
Brazil	438	557	444	--	22	10	27	-20	--	-35
Caribbean Islands	827	771	752	800	79	7	-7	-2	0	10
Central America	396	361	334	400	40	11	-9	-7	33	21
Colombia	220	238	137	--	10	-14	8	-42	--	11
Mexico	1,966	1,566	1,115	1,300	103	11	-20	-29	27	24
Peru	227	106	108	--	12	-12	-53	2	--	-0
Venezuela	778	721	493	--	77	26	-7	-32	--	-14
Canada	1,936	1,727	1,466	1,800	138	4	-11	-15	23	20
Oceania	216	204	216	200	24	-4	-6	6	0	-8
Total	38,027	31,201	26,325	28,000	2,386	9	-18	-16	6	40
Developed Countries	19,180	15,225	13,963	14,500	1,027	4	-21	-8	4	33
Less Developed Countries	14,902	12,680	10,721	12,000	1,124	7	-15	-15	12	24
Centrally Planned Countries	3,945	3,296	1,640	1,500	235	67	-16	-50	-9	804

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. F = forecast.  
 -- not available.

Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1621.

# Farm Income

Table 32.—Farm Income Statistics

	Calendar years										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 F
	\$ billion										
1. Farm receipts	97.5	114.3	133.8	142.0	144.1	147.1	141.1	146.7	149.2	140.2	137 to 139
Crops (incl. net CCC loans)	48.6	53.2	62.3	71.7	72.5	72.3	67.1	69.4	74.4	63.6	58 to 60
Livestock	47.6	59.2	69.2	68.0	69.2	70.3	69.4	72.9	69.8	71.6	73 to 75
Farm related 1/	1.2	1.9	2.2	2.3	2.5	4.5	4.5	4.4	5.0	5.1	4 to 6
2. Direct Government Payments	1.8	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7.7	11.8	14 to 16
Cash payments	1.8	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8.1	7 to 9
Value of PIK commodities	0.0	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	7 to 9
3. Total gross farm income (4+5+6) 2/	108.8	128.4	150.7	149.3	166.3	163.5	153.1	174.7	166.0	159.5	160 to 162
4. Gross cash income (1+2)	99.3	117.3	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	152 to 154
5. Nonmoney income 3/	8.4	9.3	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.8	8 to 10
6. Value of inventory change	1.1	1.9	5.0	-6.3	6.5	-1.4	-10.8	6.2	-2.7	-3.3	-3 to 0
7. Cash expenses 4/	71.4	84.2	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	96 to 98
8. Total expenses	88.8	103.2	123.3	133.1	139.4	140.0	140.4	142.7	133.7	122.1	116 to 118
9. Net cash income (4-7)	27.8	33.1	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	54 to 58
10. Net farm income (3-8)	19.9	25.2	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	42 to 46
Deflated (1982\$)	29.5	34.9	34.9	18.8	28.6	23.5	12.2	29.7	29.1	32.9	35 to 39
11. Off-farm income	26.1	29.7	33.8	34.7	35.8	36.4	37.0	38.3	42.5	44.7	47 to 49
12. Loan changes 5/: Real estate	7.6	7.6	13.0	9.3	9.4	4.0	2.5	-0.8	-5.6	-7.3	-9 to -5
13.     5/: Nonreal estate	6.8	8.3	10.9	5.9	6.2	3.4	1.0	-0.8	-9.2	-10.5	-10 to -6
14. Rental income plus monetary change	3.5	4.1	6.3	6.1	6.4	6.3	5.3	8.9	8.8	7.8	6 to 8
15. Capital expenditures 5/	15.0	17.9	19.9	18.0	16.8	13.3	12.7	12.5	9.6	8.6	6 to 8
16. Net cash flow (9+12+13+14-15)	30.8	35.1	43.7	37.5	37.9	38.4	33.6	33.6	31.6	33.4	39 to 43

F = forecast. 1/ Income from machine hire, custom work, sales of forest products, and other misc. cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add due to rounding.

Information contact: Richard Kold (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar years										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 P	1987 F
	\$ billion										
<b>Assets</b>											
Real estate 1/	507.7	600.7	704.2	779.2	780.2	745.6	736.1	639.6	559.6	515	510 to 520
Non-real estate	149.0	183.0	213.9	224.0	225.0	232.2	220.4	216.5	211.9	196	190 to 200
Livestock & poultry	31.9	51.3	61.4	60.6	53.5	53.0	49.7	49.6	45.9	44	47 to 51
Machinery & motor vehicles	69.9	78.2	90.8	96.8	103.0	103.7	100.9	95.0	92.2	89	84 to 88
Crops stored	24.8	28.0	33.5	36.5	36.1	40.6	33.2	33.7	37.1	29	25 to 28
Financial assets	22.4	25.5	28.2	30.1	32.4	34.9	36.5	38.1	36.7	35	34 to 37
Total farm assets	656.7	783.7	918.1	1,003.2	1,005.2	977.8	956.5	856.1	771.4	712	705 to 715
<b>Liabilities</b>											
Real estate	58.0	65.6	78.5	87.9	97.2	101.2	103.7	102.9	97.3	90	81 to 85
Non-real estate	52.4	66.4	76.7	82.5	91.6	102.4	98.7	95.8	94.8	86	70 to 74
CCC loans	4.5	5.7	5.1	5.0	8.0	15.4	10.8	8.6	16.9	19	12 to 14
Other non-real estate	52.4	60.7	71.6	77.5	83.6	87.0	87.9	87.1	77.9	67	58 to 60
Total farm liabilities	114.9	131.9	155.2	170.4	188.8	203.6	202.4	198.7	192.1	176	153 to 158
Total farm equity	541.8	651.8	762.9	832.9	816.4	774.2	754.0	657.3	579.3	536	553 to 558
	Percent										
<b>Selected ratios</b>											
Debt-to-assets	17.5	16.8	16.9	17.0	18.8	20.8	21.2	23.2	24.9	24.7	22
Debt-to-equity	20.0	19.3	19.6	19.7	23.1	26.3	26.8	30.2	33.2	32.9	28
Debt-to-net cash income	412.3	398.2	464.4	497.7	575.7	554.9	545.5	512.0	406.3	338.6	283.1

1/ Excludes farm household. P = preliminary. F = forecast.

Information contact: Richard Kold (202) 786-1808.



Table 34.—Cash Receipts from Farm Marketings, by State

Region State	Livestock & Products				Crops 1/				Total 1/			
	1985	1986	June	July	1985	1986	June	July	1985	1986	June	July
			1987	1987			1987	1987			1987	1987
\$ million 2/												
North Atlantic												
Maine	229	223	19	19	137	143	10	8	366	365	29	27
New Hampshire	70	72	6	6	36	38	25	2	106	109	8	8
Vermont	354	361	28	29	34	36	1	5	387	398	29	34
Massachusetts	128	131	11	11	262	292	14	16	389	423	25	27
Rhode Island	14	12	1	1	62	63	2	3	76	75	3	4
Connecticut	205	210	16	16	150	162	8	12	354	372	24	28
New York	1,847	1,808	139	139	730	724	40	66	2,578	2,533	180	206
New Jersey	144	150	12	13	443	430	42	54	587	580	54	67
Pennsylvania	2,184	2,239	191	184	1,003	926	55	60	3,187	3,165	246	244
North Central												
Ohio	1,515	1,566	136	141	2,602	2,043	68	109	4,117	3,610	204	249
Indiana	1,728	1,852	164	162	3,063	2,258	61	58	4,791	4,110	224	220
Illinois	2,055	2,143	197	192	5,915	4,737	25	122	7,970	6,880	222	314
Michigan	1,231	1,236	106	106	1,692	1,429	61	150	2,923	2,664	167	256
Wisconsin	4,055	4,164	373	361	1,019	892	27	63	5,075	5,057	400	424
Minnesota	3,370	3,395	283	290	3,223	2,680	39	121	6,594	6,074	322	411
Iowa	4,883	4,982	439	425	4,582	4,124	83	122	9,465	9,106	522	548
Missouri	1,924	1,930	137	152	1,763	1,586	88	64	3,688	3,516	225	216
North Dakota	687	676	47	36	2,001	1,623	133	126	2,688	2,299	180	162
South Dakota	1,900	1,525	106	101	1,157	938	-11	54	3,057	2,463	94	155
Nebraska	4,113	4,260	400	359	3,227	2,669	50	94	7,341	6,928	451	453
Kansas	3,336	3,447	282	363	2,552	1,978	124	252	5,888	5,425	406	614
Southern												
Delaware	353	402	28	29	139	118	11	7	492	520	39	36
Maryland	764	814	57	60	456	371	24	33	1,220	1,186	81	93
Virginia	1,062	1,127	87	96	623	486	31	48	1,684	1,613	118	144
West Virginia	191	156	13	12	56	71	3	3	247	227	15	15
North Carolina	1,958	2,174	152	154	1,871	1,608	71	40	3,929	3,782	223	194
South Carolina	415	455	33	34	621	440	56	12	1,036	894	89	47
Georgia	1,727	1,882	132	140	1,550	1,324	45	33	3,277	3,206	177	174
Florida	1,022	1,000	85	89	3,681	3,688	300	160	4,704	4,688	385	250
Kentucky	1,352	1,311	67	260	1,583	1,079	28	31	2,934	2,389	96	281
Tennessee	1,000	1,033	92	100	1,091	891	32	32	2,091	1,924	125	132
Alabama	1,301	1,431	101	107	773	578	30	31	2,074	2,009	130	138
Mississippi	1,011	1,044	76	86	1,240	741	19	-3	2,250	1,785	95	82
Arkansas	1,825	2,017	165	158	1,607	1,005	78	23	3,433	3,022	243	181
Louisiana	491	503	48	50	993	869	7	7	1,485	1,372	55	57
Oklahoma	1,726	1,875	152	196	957	746	123	78	2,683	2,622	275	274
Texas	5,441	5,516	498	487	3,841	2,928	302	352	9,282	8,444	800	840
Western												
Montana	804	720	35	23	422	493	16	36	1,226	1,213	51	60
Idaho	874	884	69	68	1,219	1,042	39	42	2,093	1,925	108	110
Wyoming	478	455	17	16	123	111	2	7	600	566	19	23
Colorado	2,084	2,218	191	192	1,097	890	46	89	3,181	3,109	237	282
New Mexico	718	708	48	49	368	302	32	41	1,086	1,010	79	91
Arizona	693	699	105	56	813	796	118	87	1,506	1,495	224	143
Utah	413	437	35	44	142	134	9	15	555	570	44	59
Nevada	144	160	12	10	81	72	4	4	225	232	17	15
Washington	926	981	88	86	1,908	1,812	156	110	2,834	2,793	244	195
Oregon	622	649	56	57	1,115	1,135	66	155	1,737	1,784	122	212
California	4,324	4,446	370	410	9,826	9,602	821	814	14,150	14,049	1,192	1,223
Alaska	8	10	1	-1	18	19	1	2	26	29	2	3
Hawaii	83	84	7	7	443	491	40	42	526	575	47	48
United States	69,780	71,573	5,915	6,182	74,413	63,612	3,431	3,893	144,193	135,185	9,347	10,074

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period.

2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 785-1804.

Table 35.—Cash Receipts from Farming

	Annual						1986	1987				
	1981	1982	1983	1984	1985	1986	July	Mar	Apr	May	June	July
	\$ million											
Farm marketings and CCC loans *	141,616	142,394	136,580	142,314	144,193	135,185	9,678	8,914	8,668	8,975	9,347	10,074
Livestock and Products	69,151	70,257	69,437	72,936	69,780	71,573	6,098	6,060	6,270	6,311	5,915	6,182
Meat animals	39,748	40,917	38,893	40,832	38,589	39,137	3,133	3,537	3,717	3,747	3,442	3,499
Dairy products	18,095	18,234	18,763	17,944	18,063	17,824	1,454	1,537	1,507	1,546	1,457	1,455
Poultry and eggs	9,949	9,520	9,979	12,192	11,191	12,678	1,190	856	911	879	877	907
Other	1,358	1,586	1,801	1,968	1,937	1,934	322	129	134	138	140	321
Crops	72,465	72,338	67,143	69,378	74,413	63,612	3,580	2,854	2,399	2,664	3,431	3,893
Food grains	11,619	11,412	9,713	9,576	9,080	9,948	775	105	28	86	680	897
Feed crops	17,770	17,409	15,535	15,831	22,479	17,849	561	61	-191	-94	171	438
Cotton (lint and seed)	4,055	4,487	3,705	3,270	3,730	2,920	56	75	-19	30	189	176
Tobacco	3,250	3,342	2,768	2,841	2,722	1,918	6	10	22	0	0	0
Oil-bearing crops	13,853	13,817	13,546	13,894	12,595	10,507	306	683	379	321	411	441
Vegetables and melons	8,772	8,063	8,462	9,142	8,558	8,705	613	824	889	1,144	924	660
Fruits and tree nuts	6,603	6,846	6,064	6,768	6,836	6,900	757	318	318	439	570	763
Other	6,543	6,993	7,352	8,057	8,413	8,865	506	777	974	739	487	517
Government payments	1,932	3,492	9,295	8,430	7,704	11,813	-56	2,204	1,774	608	35	281
Total	143,548	146,086	145,875	150,744	151,897	146,998	9,622	11,118	10,392	9,583	9,382	10,355

\* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar years									
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
	\$ million 2/									
Feed	13,967	16,036	19,314	20,971	20,855	18,592	21,725	19,852	18,015	16,179
Livestock	7,072	10,150	13,012	10,670	8,999	9,684	8,814	9,498	8,996	9,609
Seed	2,484	2,638	2,904	3,220	3,428	3,172	2,993	3,448	3,350	2,984
Farm-origin inputs	23,523	28,824	35,230	34,861	33,282	31,448	33,532	32,798	30,361	28,772
Fertilizer	6,529	6,820	7,369	9,491	9,409	8,018	7,067	7,429	7,259	5,787
Fuels and oils	4,356	4,609	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790
Electricity	1,069	1,389	1,447	1,526	1,747	2,041	2,146	2,166	2,150	2,121
Pesticides	1,938	2,656	3,436	3,539	4,201	4,282	4,154	4,767	4,817	4,331
Manufactured inputs	13,892	15,274	17,887	22,435	23,927	22,229	20,870	21,505	20,810	17,029
Short-term interest	4,203	5,167	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,795
Real estate interest	4,329	5,060	6,190	7,544	9,142	10,481	10,815	10,733	9,878	9,131
Total interest charges	8,532	10,227	13,058	16,261	19,864	21,830	21,430	21,129	18,699	16,926
Repair and maintenance 3/	5,765	6,638	7,280	7,648	7,587	6,428	6,529	6,416	6,370	6,426
Hired labor	7,953	8,279	8,981	9,293	8,931	10,075	9,726	9,729	9,792	9,875
Machine hire and custom work	1,682	1,776	2,063	1,823	1,984	2,025	1,896	2,170	2,184	1,791
Dairy deduction	0	0	0	0	0	0	650	657	163	431
Marketing, storage, and transportation	1,390	2,508	3,162	3,070	3,523	4,301	3,904	4,012	4,127	3,652
Misc. operating expenses 4/	3,582	5,194	6,246	6,308	6,343	7,262	8,439	8,450	7,942	7,344
Other operating expenses	20,372	24,395	27,732	28,142	28,368	30,889	31,143	31,433	30,579	29,519
Capital consumption	15,493	16,963	19,345	21,474	23,573	24,287	23,873	23,105	20,891	18,997
Taxes	3,660	3,603	3,871	3,891	4,246	4,036	4,469	4,059	4,231	4,125
Net rent to non-operator landlord	3,412	3,963	6,182	6,075	6,184	6,059	5,060	8,640	8,124	6,684
Other overhead expenses	22,565	24,529	29,398	31,440	34,003	34,381	33,402	35,805	33,247	29,806
Total production expenses	88,884	103,249	123,305	133,139	139,444	139,978	140,375	142,669	133,696	122,052

1/ Includes operator household. 2/ Totals may not add due to rounding. 3/ Beginning in 1982 repairs and maintenance excludes motor vehicle registration fees and insurance. 4/ Beginning in 1982, misc. operating expenses includes other livestock purchases and motor vehicle registration fees and insurance.

Information contact: Richard Kodl (202) 786-1808; Craig Jagger (202) 786-1804.



Table 37.—CCC Net Outlays by Commodity &amp; Function

	Fiscal years										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987E	1988E
	\$ million										
Commodity											
Feed grains	2,288	1,144	1,286	-533	5,397	6,815	-758	5,211	12,211	13,388	8,272
Wheat	844	308	879	1,543	2,238	3,419	2,536	4,691	3,440	2,787	2,042
Rice	-66	49	-76	24	164	664	333	990	947	1,020	753
Upland cotton	224	141	64	336	1,190	1,363	244	1,553	2,142	1,619	89
Tobacco	98	157	-88	-51	103	880	346	455	253	-326	-217
Dairy	240	24	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,238	993
Soybeans	31	4	116	87	169	288	-585	711	1,597	-446	47
Peanuts	-39	27	28	28	12	-6	1	12	32	7	1/
Sugar	395	313	-405	-121	-5	49	10	184	214	-350	--
Honey	3	-2	9	8	27	48	90	81	89	82	66
Wool	33	39	35	42	54	94	132	109	123	149	126
Other	1,608	1,407	-107	780	122	2,710	3,463	1,601	2,455	3,959	4,056
Total	5,656	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	23,127	16,227
Function											
Price support loans	1,377	2	-66	174	7,015	8,438	-27	6,272	13,628	11,549	5,618
Direct payments	2,268	1,811	418	1,030	1,491	3,600	2,117	7,827	6,746	6,109	3,876
Purchases	100	10	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	276
Producer storage payments	216	247	254	32	679	964	268	329	485	578	610
Processing, storage, & transportation	89	128	259	323	355	665	639	657	1,013	1,539	1,634
Operating expense	101	97	157	159	294	328	362	346	457	537	530
Interest expenditure	-106	238	518	220	-13	3,525	1,064	1,435	1,411	1,134	1,055
Export programs	948	417	-669	-940	65	398	743	134	102	459	615
Other	662	662	200	1,436	-265	-1,607	679	-648	329	1,701	2,013
Total	5,656	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	23,127	16,227

E = Estimated in the FY 1988 Mid-Season Review. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds). 1/ = less than 500,000.

Information Contact: Richard Pazdalski (202) 447-5148

## Transportation

Table 38.—Rail Rates; Grain &amp; Fruit/Vegetable Shipments

	Annual			1986	1987					
	1984	1985	1986 P	Aug	Mar	Apr	May	June	July	Aug
Rail freight rate index 1/ (Dec 1984=100)										
All products	99.3	100.0	100.7	100.7	99.8	100.1	100.0 P	100.2 P	100.1 P	100.2 P
Farm products	98.7	99.0	99.6	99.9	99.1	99.7	97.9 P	99.5 P	98.3 P	99.3 P
Grain	98.6	98.3	98.9	99.2	98.8	98.6	96.9 P	98.8 P	98.6 P	98.6 P
Food products	99.1	100.1	99.9	99.6	98.4	98.5	98.7 P	98.8 P	98.8 P	98.7 P
Grain										
Rail carloadings (thou cars) 2/	27.2	22.9	24.3	24.3	27.3 P	25.3 P	25.7 P	32.7 P	31.7 P	30.5 P
Fresh fruit & vegetable shipments										
Piggy back (thou cwt) 3/ 4/	570	602	628	514	493 P	678 P	864 P	833 P	792 P	491 P
Rail (thou cwt) 3/ 4/	640	532	559	221	533 P	624 P	810 P	917 P	469 P	240 P
Truck (thou cwt) 3/ 4/	8,006	8,298	8,870	8,643	8,541 P	9,771 P	10,197 P	11,270 P	10,217 P	8,672 P
Cost of operating trucks hauling produce 5/										
Owner operator (cts/mile)	115.5	116.1	113.0	111.8	115.1	115.1	115.5	115.4	116.8	116.9
Fleet operation (cts/mile)	115.3	116.7	113.5	112.1	114.9	115.0	115.8	116.0	116.9	117.2

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1986 and 1987. 5/ Office of Transportation, USDA. P = preliminary.

Information Contact: T.O. Hutchinson (202) 786-1840.

## Indicators of Farm Productivity

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Table 39.—Indexes of Farm Production Input Use & Productivity

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(See the Jan.-Feb. 1987 issue.)

Information contact: James Johnson (202) 786-1800.

## Food Supply and Use

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Table 40.—Per Capita Food Consumption Indexes (1967 = 100)

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(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.

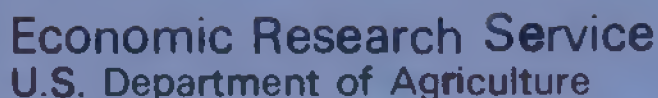
Table 41.—Per Capita Consumption of Major Food Commodities (Retail Weight)

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(See the Dec. 1986 issue.)

Information contact: Harry Harp (202) 786-1870.





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